



COUNTY BOROUGH OF BIRKENHEAD



ANNUAL REPORT

OF THE

MEDICAL OFFICER

FOR

1936

D. MORLEY MATHIESON, M.A., M.D.(Edin.), Ch.B., D.P.H.

Medical Officer of Health;

Chief Medical Officer for the Municipal Tuberculosis, Mental Deficiency,
Maternity and Child Welfare, &c., Schemes, and for the School Medical Service
and Medical Adviser to the Public Assistance Committee.



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HIS WORSHIP THE MAYOR OF BIRKENHEAD
(Councillor G. S. Prentice, J.P.)

CHAIRMEN OF COMMITTEES
(31/12/1936)

Education Committee	Alderman NAYLOR, J.P.
Finance Committee	Councillor ALLERY, J.P.
Health Committee	Alderman TWEEDLE, J.P.
Maternity & Child Welfare Committee	Coun. Mrs. MERCER, J.P.
Mental Deficiency Committee	Councillor Mrs. COCHRANE
Public Assistance Committee	Alderman MILLER.
Water Committee	Alderman McLELLAN, J.P.

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P R E F A C E

The Registrar-General's estimate of the population as at Midsummer, 1936, is 148,000.

The birth rate for 1936 was 17.2 per 1,000 as compared with 17.8 for 1935; and the death rate 12.6 per 1,000 as against 12.5 for 1935.

The infantile mortality rate was 63 per 1,000 births as compared with 67 in the previous year.

The cancer death rate again showed a slight increase, as also did this rate for England and Wales. (P. 44) The death rate from tuberculosis was 88 per 100,000 as against 73 in 1935.

The work of the Municipal Hospital has steadily increased. 4,980 patients were admitted, as compared with 4,771 in 1935; and 965 major operations were performed, as compared with 916. The average duration of stay was decreased from 33 days to 31.4.

The number of patients admitted to the Infectious Diseases Hospital during the year showed a decrease of 108 as against that for 1935. This was chiefly due to a decline in the incidence of diphtheria. (P. 36).

At Landican Cemetery 112 cremations took place, as compared with 78 in 1935.

At Cranage Hall more accommodation for mentally defective persons became available during the year. (P. 54).

There was an increase of 18,004 in the number of animals killed at the Birkenhead Abattoirs (Woodside and New Chester Road) as compared with 1935.

Progress was made in the improvement of housing conditions in the Borough during the year. A representation by the Medical Officer of Health with regard to 360 houses which had been scheduled under Part I of the Housing Act, 1930, was approved by the Council and has been forwarded to the Minister of Health. A comprehensive survey of working class dwellings with regard to conditions of overcrowding was carried out during the year. Full details will be found in the "Housing and Environmental Hygiene" section of the report. (P. 58 et seq.)

There was an increase of 1,322 attendances at the antenatal clinics as compared with the previous year.

Dr. Eric Blackstock took up duty as Assistant Medical Officer on 24th February, 1936. By this appointment it was possible to arrange for extra clinic sessions to be held in connection with the tuberculosis and maternity and child welfare schemes.

On 17th August, 1936, Dr. Agnes Annie Muir commenced duties as Assistant Medical Officer. This appointment was made on the representation of the Board of Education in order that nutritional surveys of children attending the elementary schools in the Borough could be carried out.

Dr. Mary A. S. Deacon, Assistant Medical Officer, who has been on the staff of the department since 1919 retired, upon reaching the

age limit, on superannuation on 15th November, 1936. I should like to put on record my high appreciation of the services rendered by Dr. Deacon during her period of office.

To fill the vacancy caused by the retirement of Dr. Deacon, Dr. Patricia Unsworth was appointed to the post and will take up duty early in the coming year.

As previously stated all the full-time Assistant Medical Officers are also Assistant School Medical Officers; and close co-ordination among all the Health Services, including the School Medical Service, provided by the Corporation is ensured as far as staff is concerned.

Mr. A. C. Capper, L.D.S., took up duty as an Assistant School Dental Surgeon on 1st January, 1936.

The conscientious and highly-skilled work done during the year by members of the staff—in hospitals, clinics, laboratory, office, and elsewhere—often under difficult and trying conditions, calls for grateful acknowledgment. I have also to express my thanks to those Chief Officers of other departments of the Corporation who have, by their active co-operation, helped on the cause of Public Health in the Borough.

Finally, it is a pleasure as well as a duty to record the keen interest invariably shown by the Committees directly concerned in the multifarious problems presented to them. To manage efficiently and economically, and keep up-to-date, hospitals and other institutions: to carry out the highly complicated duties imposed by Parliament—enormously increased in recent years; and at the same time to comprehend, and wisely to apply locally, new measures coming into force almost month by month, has been no light task.

D.M.M.

SHORT STATISTICAL SUMMARY

1936

Area of the Borough	8,586 acres, or 13.4 square miles
Estimated population (at midsummer, 1936)	148,000
Number of persons per acre (density of population)	17.2
Approximate number of houses in Borough at end of 1936 ...	32,537
Number of inhabited houses at time of census, 1931	30,493
Number of families or separate occupiers at time of census, 1931	35,577
Rateable value, April, 1936	£990,424
Estimated product of penny rate, 1936-1937	£3,768
Birkenhead consolidated rate, 1936-1937	14/- in the £
Birth-rate per 1,000 of the population	17.2
Death-rate ,, ,,	12.6
Average death-rate for the last ten years	12.6
Tuberculosis death-rate per 1,000 of the population	0.88
Infantile mortality rate (per 1,000 births)	63
Average number of children in elementary schools	21,268
Number of elementary school children medically inspected during year	7.966

ADMINISTRATION

General administrative arrangements.—The detailed arrangements made by the local authority for dealing with various branches of health work—e.g., maternity and child welfare, tuberculosis, etc.—are set out in the appropriate sections of this report.

Staff.—The staff engaged on the work of the department consisted at the end of 1936 of the following:—

Medical Officer of Health and Chief Administrative Medical Officer:

D. Morley Mathieson, M.A., M.D. (Edin.), Ch.B., D.P.H.

Deputy Medical Officer of Health:

F. G. Foster, M.A., M.D., Ch.B., D.P.H.

Assistant Medical Officers:

Anna May Williams, M.B., Ch.B., D.P.H.

J. Morrison Ritchie, M.A., M.B., Ch.B., D.P.H.

E. Blackstock, B.Sc., M.D., B.Ch., B.A.O., D.P.H.

R. Sandilands, B.Sc., M.B., Ch.B., D.P.H.

Agnes A. Muir, M.D., Ch.B., D.P.H.

*Phyllis Marsh, M.B., Ch.B.

(one vacancy)

Medical Staff, Birkenhead Municipal Hospital:

Ross A. Grant, F.R.C.S., M.B., Ch.B. (Medical Superintendent).

Neville J. Nicholson, F.R.C.S., M.B., Ch.B. (Deputy Medical Superintendent).

E. A. J. Byrne, M.D., B.Ch., B.A.O. (Senior Resident Medical Officer).

J. L. Brown, M.B., Ch.B., M.R.C.S., L.R.C.P. (Resident Medical Officer).

T. J. Davies, B.Sc., M.B., B.S., M.R.C.S., L.R.C.P. (Resident Medical Officer).

A. Watt, M.B., Ch.B. (Resident Medical Officer).

Consultants:

*R. W. Gemmell, M.D., Ch.B., D.P.H. (Radiologist).

*W. Johnson, M.D., F.R.C.P. (Physician).

*P. W. Leathart, B.A., M.B., B.Ch. (Aurist and Laryngologist).

*S. Barton Hall, M.D., Ch.B., D.P.M. (Psychiatrist).

*T. Hartley Martin, M.B., Ch.B. (Orthopaedic Surgeon).

*S. B. Herd, M.D., B.S., M.C.O.G. (Obstetrician and Gynaecologist).

*D. L. Charters, M.B., Ch.B. (Ophthalmic Surgeon).

Dental Surgeons:

P. Wilson Smith, L.D.S.

Eveline M. Warlow, L.D.S.

W. G. Walch, L.D.S.

A. C. Capper, L.D.S.

*C. F. Anderson, L.D.S.

Veterinary Officer:

N. M. Clayton, M.R.C.V.S.

Bacteriologist and Pathologist:

Dr. J. Morrison Ritchie (Assistant Medical Officer).

Analyst:

*W. H. Roberts, M.Sc., F.I.C.

Matron, Birkenhead Municipal Hospital:

Miss J. Rhodes.

Matron, Infectious Diseases Hospital:

Miss L. Liggins.

Matron, Thingwall Sanatorium:

Miss I. R. Millar.

Health Nurses:

Miss K. Nixon (Chief Health Nurse).

Miss A. G. Adams, Miss J. Beattie, Miss S. J. Briscoe, Miss A. G. Evans, Miss C. E. Fox, Miss M. M. Graham, Miss E. Hendley, Miss C. M. Jones, Miss M. Jones, Miss A. McDonald, Miss J. McDonald, Miss J. A. Mullooly, Miss G. F. Parkinson, Miss E. Ramage, Miss B. Shepherd, Miss D. Smith, Miss A. I. Steele, Miss L. Wilson, Miss A. Williams, Mrs. C. B. Williams.

Inspector of Midwives:

(Post vacant).

Assistant Inspector of Midwives:

Miss M. M. Graham (Health Nurse).

Inspectors:

Alfred Longstaff (Chief Inspector and Inspector under the Food and Drugs Acts).

M. Holgate (Housing Inspector), J. Croshaw, G. Wills, T. Oversby, A. Greenfield, G. H. Birch, G. H. Williams, J. E. Dobson, G. F. Lewis (District Sanitary Inspectors), W. J. Hayes (Sanitary Inspectors' Assistant), F. Duggins (Workshops, Food and Drugs, etc., Inspector), P. H. Saunders (Smoke Abatement and Common Lodging House Inspector), W. S. Edwards (Infectious Diseases Inspector), Archbell Carnie (Meat Inspector), W. Cameron, A. T. Haughton, J. B. Lowsby, N. Owen, L. C. Warburton (Assistant Meat Inspectors).

Clerical Staff, Steward, etc.:

W. M. Cavers (Chief Clerk), W. A. Lyth (Steward), J. Owen (Senior Clerk).

J. Bennett, N. Wilson, R. Baker, C. Martin, A. Barnett, F. Owens, A. Cross, E. P. Dwerryhouse, C. L. Weekes, D. A. Jenkins, A. C. Horne, D. K. Ashton, R. H. Hall, E. Beard; S. Burge, A. W. Gaskell, D. Phoenix, H. Dean (Junior Clerks); Miss J. M. Dickens, Miss W. A. Calloway, Miss C.

L. Weston, Miss W. Nash, Miss M. Roberts, Miss E. Apperson, Miss E. B. Shepherd, Miss M. Purden, Miss M. Evans, Miss M. Piper, Miss D. Stephens, Miss J. Dickie (Female Clerks).

Public Vaccinators:

*H. Cresswell Pierce, M.A., M.R.C.S., L.R.C.P.

*Ross A. Grant, F.R.C.S., M.B., Ch.B.

(One vacancy).

Vaccination Officers:

*O. R. Lockey.

*E. W. Owens.

Other Staff:

Nursing Staff, Birkenhead Municipal Hospital	134
Dispenser, Birkenhead Municipal Hospital	1
Masseuse, Birkenhead Municipal Hospital	1
School Teacher, Birkenhead Municipal Hospital	1
Domestic Staff, Birkenhead Municipal Hospital	30
Male Staff, Birkenhead Municipal Hospital	16
Nursing Staff, Infectious Diseases Hospital	31
Domestic Staff, Infectious Diseases Hospital	20
Male Staff, Infectious Diseases Hospital	6
Nursing Staff, Thingwall Sanatorium	7
School Teacher, Thingwall Sanatorium	1
Domestic Staff, Thingwall Sanatorium	6
Male Staff, Thingwall Sanatorium	2
Assistants on Meat Inspection Work	2
Laboratory Assistants	3
Male Orderly (Venereal Diseases Clinic)	1
Home Teachers (Blind Persons)	2
Supervisor and Assistant Supervisor (Occupation Centre) ...	2
Dental Attendant	1

*Not whole-time officers.

SUPERANNUATION SCHEME

The Local Government and Other Officers' Superannuation Act, 1922, was adopted by the Birkenhead Corporation in June, 1923, and came into operation on 1st August, 1923.

The number of posts in the Corporation service designated as "established posts" for the purposes of the Act was 1,906, of which 1,711 were actually filled at the date on which the Act came into force, and 195 were additional posts. Since the commencement of the scheme 938 new posts have been created, making a total of 2,844.

Medical examinations carried out during 1936.—During the past year 242 examinations of selected applicants for designated posts were carried out, as compared with 126 in the previous year.

Department	Designated Posts
Audit	1
Borough Engineer and Surveyor's	14
Borough Treasurer's	7
Cleansing	25
Education	2
Electricity	33
Gas	1
Libraries	7
Medical Officer's	32
Parks and Cemeteries	2
Public Assistance	98
Town Clerk's	1
Transport	12
Water	7
Total examinations	242

Note.—In addition to the above there were 34 re-examinations during 1936.

POPULATION, BIRTHS, AND DEATHS

POPULATION

Population.—The population of the Borough as recorded at the time of the 1931 census was 147,803.

The Registrar-General's estimate of the population of the Borough as at mid-year, 1936, was 148,000.

BIRTHS

Births registered during 1936, and birth-rate.—During the year 2,554 births belonging to the Borough were *registered*. (This total includes 64 Birkenhead births registered in other areas and transferred to Birkenhead, and excludes 254 births belonging to other areas which occurred in Birkenhead and were transferred to the areas concerned. Among the latter are numerous births which occurred at the Birkenhead Maternity Hospital and the Birkenhead Municipal Hospital).

This corresponds to a birth-rate of 17.2 per 1,000 of the population.

Birth-rate in recent years.—The birth-rates since 1927 are as follows:—

1927	18.2 per 1,000
1928	18.5 „
1929	18.9 „
1930	17.8 „
1931	18.4 „
1932	17.7 „
1933	17.1 „
1934	17.6 „
1935	17.8 „
1936	17.2 „

Comparison of birth-rate with rates for country generally—

	Per 1,000 of population	
	Live births	Still births
England and Wales	14.8	0.61
122 County Boroughs and Great Towns (including London)	14.9	0.67
143 smaller towns (estimated resident populations 25,000-50,000 at census, 1931)	15.0	0.64
London Administrative County	13.6	0.53
Birkenhead	16.4	0.94

Sex-distribution of births.—Of the 2,425 live births, 1,280 were males and 1,145 females; a proportion of 1,118: 1,000.

Legitimacy.—Of the 2,425 live births registered, 97 were illegitimate, a percentage of 4.0.

Registration of stillbirths.—Under Section 7 of the Births and Deaths Registration Act, 1926, the birth of every stillborn child* must

*i.e., born dead after the twenty-eighth week of pregnancy

be registered by the Registrar in a register of stillbirths. The Registrar-General has kindly furnished me with the numbers of stillbirths registered during 1936 in Birkenhead. The total number was 140. In addition, there were 2 inwards transfers. There were 12 stillbirths registered in Birkenhead belonging to other areas. Thus the nett number of stillbirths belonging to the Borough was 129, classified as follows:—

Legitimate—Males	59
Females	61
Illegitimate—Males	6
Females	3
	<hr/>
	129
	<hr/>

The stillbirth rate was 53 per 1,000 births.

Births notified during 1936.—During the year, 2,658 births were notified in the Borough under the Notification of Births Acts, 1907 and 1915. Of these 133 were stillbirths, leaving a total of 2,525 live births. This total includes births which occurred in the Birkenhead Maternity Hospital, the Birkenhead Municipal Hospital, and the Birkenhead General Hospital, many of which were transferable to other areas.

The following is an analysis of the above births:—

Births in Public Institutions:—

Birkenhead Maternity Hospital...	400	(32 stillbirths)
Birkenhead Municipal Hospital...	406	(28 ,,)
Birkenhead General Hospital ...	4	(— ,,)
Births in Nursing Homes	144	(5 ,,)

Other births:—

Notified by doctors	57	(3 ,,)
Notified by midwives	1647	(65 ,,)
Notified by parents	—	(— ,,)

2658 (133 stillbirths)

Un-notified births.—The Registrars reported 96 cases of un-notified births; 29 of these were attended by medical practitioners, 55 by both certified midwives and doctors, 9 by the Maternity Hospital staff, and 3 by the Birkenhead Municipal Hospital staff.

DEATHS

Death-rate.—1,864 deaths occurred during the year; the total figure includes 106 deaths of Birkenhead residents which occurred outside the Borough, but excludes 292 deaths of non-residents which occurred in the area. This gives a death-rate of 12.6 per 1,000.

Deaths in recent years.—The death-rates since 1927 are as follows:—

1927	12.6 per 1,000
1928	12.3 "
1929	13.9 "
1930	11.7 "
1931	13.4 "
1932	11.6 "
1933	13.5 "
1934	12.0 "
1935	12.5 "
1936	12.6 "

Seasonal deaths.—The following gives the deaths for each quarter of the years 1935 and 1936 :—

	No. of deaths	
	1935	1936
First quarter.....	515	619
Second quarter.....	458	457
Third quarter.....	358	350
Fourth quarter.....	536	438
Totals	1867	1864

Sex-distribution of deaths.—Of the total deaths 956 were males and 908 females, a proportion of 1,052 : 1,000.

Uncertified deaths.—In 1936 there were 3 uncertified deaths belonging to the area.

Coroners' inquests.—Coroners' inquests were held regarding 102 deaths—that is, in 5.4 per cent. of the total deaths during the year.

The Coroners' (Amendment) Act, 1926.—This Act came into force on 1st May, 1927. During the year 48 deaths (2.5 per cent. of the total deaths during the year) were registered without the Coroner holding an inquest.

Causes of death.—Detailed causes of death during 1936, compiled in this department, are not published in this report. Table P. 1 (pages 6 and 7), prepared by the Registrar-General, shows the causes of death of Birkenhead residents, sub-classified according to sex and age.

Infantile mortality.—There were 152 deaths of infants under 1 year old. This corresponds to an infantile mortality rate of 63 per 1,000 births.

There were 8 deaths in illegitimate infants under 1 year old; giving an illegitimate mortality rate of 82 per 1,000. The causes of infant deaths, and the ages at which death occurred are shown in Table P 2 (page 8).

The corresponding rates for each year since 1927 are given below:

1927	95
1928	80
1929	86
1930	86
1931	86
1932	71
1933	99
1934	60
1935	67
1936	63

The main causes of infant deaths during the past two years are shown below:—

	No. in 1935	No. in 1936
(a) Pneumonia (all forms)	36	19
Bronchitis	6	3
Whooping cough	5	5
Measles	—	9
Diarrhœa and enteritis	13	8
(b) Premature birth	46	52
(c) All other causes	65	56
	<hr/> 171	<hr/> 152

Deaths from tuberculosis.—Tuberculosis was responsible for 6.9 per cent. of all the deaths recorded in the Borough in 1936. The deaths from the disease were as follows:—

Deaths from tuberculosis of the lungs	118
Deaths from other forms of tuberculosis	12
	<hr/> 130

This gives a tuberculosis death-rate of 0.88 per 1,000 of the population.

Of the 118 deaths from respiratory tuberculosis during 1936, 109 occurred in individuals between 15 and 65 years old—that is, of a wage-earning age.

This subject is further dealt with in the “ Tuberculosis ” section of this report.

Deaths from certain epidemic diseases.—The seven “ principal epidemic diseases ” caused 71 deaths, as follows :—

Diarrhœa and enteritis (under 2 years)	10
Whooping cough	13
Measles	30
Scarlet fever	1
Diphtheria (including membranous croup)	17
Fever (enteric, typhus, and simple continued)...	0
Smallpox	0

This corresponds to a death-rate from all these diseases of 0.48 per 1,000 of the population.

Deaths from other notifiable infectious diseases.—Pneumonia caused, in its various forms, 109 deaths; erysipelas caused 7; cerebro-spinal fever caused 3.

Comparison of Birkenhead death-rates with those for country generally.—In Table P 3 (page 9) Birkenhead rates are shown together with those for the country generally. The latter are provisional figures kindly supplied by the Registrar-General. Non-civilians are included in the figures for England and Wales, but not for other areas.

TABLE P 1

Deaths : causes, sex, and ages (as compiled by the Registrar-General)

Causes of death	Sex	All ages	Ages										
			0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—
All causes	{ Male Female	953 908	88 63	18 20	19 24	26 19	30 27	34 38	60 37	115 100	188 139	220 205	155 236
1 Typhoid and paratyphoid fevers	{ Male Female	...	...	...	...	...	...	...	...	...	...	...	...
2 Measles	{ Male Female	16 15	6 3	7 5	3 6	1	...	...	...	...	...	...	...
3 Scarlet fever	{ Male Female	1	...	1	...	...	...	...	...	...	...	...	...
4 Whooping cough	{ Male Female	2 11	1 4	...	1 2	...	...	...	...	...	...	...	...
5 Diphtheria	{ Male Female	10 7	2 ...	1 1	2 3	4 3	1	...	...	...	...	...	...
6 Influenza	{ Male Female	8	...	...	...	2	2	1	2	1	1	1	4
7 Encephalitis lethargica	{ Male Female	8	...	...	...	...	...	1	...	1	...	1	...
8 Cerebro-spinal fever	{ Male Female	2 1	...	...	...	1	...	...	...	...	...	...	...
9 Tuberculosis of respiratory system	{ Male Female	61 51	...	...	...	1 1	4 12	12 16	13 5	17 11	11 4	3 2	...
10 Other tuberculous diseases	{ Male Female	7 9	1 1	...	2	2 1	2 5	1	...	1	...	...	...
11 Syphilis	{ Male Female	5 2	1	...	...	1	...	...	1	2	...	1	...
12 General paralysis of the insane, tabes dorsalis	{ Male Female	9 4	...	...	...	...	...	...	...	3	3	1	2
13 Cancer, malignant disease	{ Male Female	138 111	...	...	1	1	1	1	5	22	43	50	15
14 Diabetes	{ Male Female	8	...	...	...	...	...	3	12	20	28	26	20
15 Cerebral hemorrhage, etc.	{ Male Female	12 33	...	...	...	...	...	...	...	...	6	2	1
16 Heart disease	{ Male Female	60 233	...	...	...	...	...	1	6	1	9	8	13
17 Aneurysm	{ Male Female	225 4	...	...	...	...	6	2	2	26	52	73	86
	{ Male Female	225 4	...	...	...	2	2	4	2	21	35	8	1

TABLE P 2

Infant deaths: causes and ages

Causes of death	Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 4 weeks	Over 4 weeks & under 3 months	3-6 months	6-9 months	9-12 months	Total under 1 year
All causes.....	56	10	5	5	76	22	17	17	20	152
Smallpox ..	..	..	..	..	..	..	..	..	..	..
Chickenpox ..	..	..	..	..	..	..	..	..	..	..
Measles .....	..	..	..	..	..	..	3	6	9	..
Scarlet fever .....	..	..	..	..	..	..	..	..	..	..
Whooping cough .....	..	..	..	..	..	1	..	4	5	..
Diphtheria .....	..	..	..	..	..	..	1	1	2	..
Influenza ..	..	..	..	..	..	..	..	..	..	..
Tuberculosis of central nervous system .....	..	..	..	..	..	..	1	..	1	..
Tuberculosis of intestines and peritoneum .....	..	..	..	..	..	..	..	..	..	..
Meningitis (not tuberculous).....	..	..	1	..	1	..	1	..	2	..
Convulsions	1	..	..	..	1	..	..	..	1	..
Bronchitis (all forms).....	1	..	..	..	1	..	1	1	3	..
Pneumonia (all forms)	1	1	..	..	2	3	3	6	5	19
Diarrhoea and enteritis .....	..	..	..	2	2	2	3	1	8	..
Gastritis .....	..	..	..	..	..	..	..	..	..	..
Syphilis .....	..	..	..	..	..	..	..	..	..	..
Rickets ..	..	..	..	..	..	..	..	..	..	..
Injury at birth	2	..	..	..	2	..	..	..	2	..
Atelectasis	2	2	..	..	4	..	..	..	4	..
Congenital malformations.....	6	..	2	..	8	5	1	..	15	..
Premature birth	40	4	1	..	45	5	2	..	52	..
Atrophy, debility and marasmus .....	..	..	..	2	2	8	4	..	14	..
Other causes.....	3	3	1	1	8	1	4	1	15	..
Totals..	56	10	5	5	76	22	17	17	20	152

Nett live births in the year—

Legitimate 2328

Illegitimate 97

Nett deaths in the year—

Legitimate infants 144

Illegitimate infants ... 8

TABLE P 3

Death-rates: comparison with rest of country

	Annual death rate per 1000 civilian population								Rate per 1000 live births		
	All causes	Typhoid and Paratyphoid fevers	Smallpox	Measles	Scarlet fever	Whooping cough	Diphtheria	Influenza	Violence	Diarrhoea and enteritis (under 2 years)	Total deaths under 1 year
England and Wales	12.1	0.01	—	0.07	0.01	0.05	0.07	0.14	0.52	5.9	59
122 County Boroughs and Great Towns including London (census population ex- ceeding 50,000)	12.3	0.01	—	0.09	0.01	0.06	0.08	0.14	0.45	8.2	63
143 Smaller Towns (estimated resident populations 25,000 to 50,000 at Census 1931)	11.5	0.00	—	0.04	0.01	0.04	0.05	0.15	0.39	3.4	55
London Administrative County	12.5	0.01	—	0.14	0.01	0.06	0.05	0.14	0.52	14.4	66
Birkenhead.....	12.6	—	—	0.20	0.00	0.08	0.11	0.10	0.61	4.1	63

WATER SUPPLY, FOOD, AND DRUGS

At the end of the year the permanent staff engaged on meat inspection consisted, in addition to the Veterinary Officer (Mr. N. M. Clayton), of one meat inspector, five assistant inspectors, two detention officers, and one junior clerk.

The Chief Sanitary Inspector, Mr. Alfred Longstaff, was responsible throughout the year for the taking of all samples of milk and other food stuffs, and of drugs, for chemical and bacteriological examination. A special Food and Drugs Inspector also devotes the greater part of his time to this work.

The chemical analysis of samples has been carried out, under a temporary arrangement, by Mr. W. H. Roberts, M.Sc., F.I.C., City Analyst, Liverpool.

The bacteriological examination of samples has been dealt with in the Municipal Laboratory.

WATER SUPPLY

With the exception of Prenton and Upton Wards, all the Borough is supplied with water from the Corporation Waterworks at Alwen. The supply for Prenton and Upton Wards comes from the West Cheshire Water Board.

The consumption of water in Birkenhead from the Alwen supply during the year ending 31st December, 1936, was 1,352,502,000 gallons.

Bacteriological examinations.—The bacteriological examination of the Alwen water supply is carried out in the laboratory in the Department.

During the past year, bacteriological examinations have been made in connection with:—

49 samples of tap water in Birkenhead.

12 samples of water from the Alwen Reservoir, before filtration.

24 samples of water at Alwen, after passing through the filtration apparatus.

The latter tests provide a very useful and sensitive check on the efficacy of the filtration process.

MILK SUPPLY

Dairy Farms.—Milk is supplied to the Borough chiefly from farms in Cheshire, Shropshire, Denbighshire and Flintshire.

(a) *Farms, etc., outside the Borough.*—During the year 335 samples of milk supplied from outside farms were taken in the Borough by the Veterinary Officer. Of these 34 (approximately 10 per cent.) were found to contain tubercle bacilli. In connection with these infected samples, 39 visits were paid by the Veterinary Officer, under the provisions of the Milk and Dairies (Consolidation) Act, 1915, to milk producers' farms outside the Borough in connection with milk samples which proved, upon examination at the Municipal Laboratory, to be

tuberculous. These visits were made in company with the County Veterinary Inspectors of the districts concerned, and 1,029 cows were examined. Samples from all cows suspected to be affected with tuberculosis were taken for examination by the County Authorities. On the farms inspected 23 cows were found to be giving tuberculous milk. The 23 cows were slaughtered.

In the case of the tuberculous samples in respect of which no cows were detected on examination of the herd, it was found that the suspected animals had been slaughtered previously or that they had been sold from the herd.

(b) *Farms, etc., within the Borough.*—At the end of the year there were 27 farms within the Borough with a population of 500 dairy cows.

During the year, under the provisions of Part IV. of the Milk and Dairies Order, 1926 (an Order made by the Minister of Health), quarterly examinations were made by the Veterinary Officer of all dairy cows within the Borough. 102 visits were paid to the 27 farms in the Borough, and 1,968 inspections of cows were made. 6 samples of milk from cases showing induration of the udder were taken and examined microscopically for the presence of tubercle bacilli. In 2 cases the results were positive and the affected cows were immediately slaughtered. 17 cows affected with tuberculosis in other forms than tuberculosis of the udder were also slaughtered. The remaining 4 samples, which were negative on microscopical examination, were subjected to biological tests in the Municipal Laboratory. The results proved negative in all cases. 1 cow was found to be suffering from an affection detrimental to the milk supply, and the use of its milk for human consumption was prohibited. There are 5 herds within the Borough licenced under the Milk (Special Designations) Order, 1936, for the production of "accredited" milk. These herds were examined quarterly; 638 examinations were made. 12 cows were found to be affected with conditions requiring exclusion from the herds, and they were isolated or removed immediately as indicated by their condition.

Milkshops and the retail sale of milk.—There are 134 registered milkshops in Birkenhead. In addition, the following are registered for retailing milk within the Borough—89 farmers resident outside Birkenhead, 9 "purveyors" of milk, and the owners of the 27 cowsheds within the Borough referred to in the preceding paragraph.

Applications for registration.—During the year applications for registration—Milk and Dairies (Amendment) Act, 1922—have been received from 13 persons desiring to retail milk within the Borough. These have been placed on the register.

Sale of "Graded" milk.—Under the Milk (Special Designations) Order, 1923, the following licences were granted:—

6 licences to persons other than producers to retail *certified milk* within the Borough.

2 licences to bottle and sell *Grade A (Tuberculin Tested) milk*.

3 licences to sell *Grade A (Tuberculin Tested) milk*.

7 licences to bottle and sell *Grade A milk*.

6 licences to sell *Grade A milk*.

2 supplementary licences to sell *Grade A milk*.

5 licences to produce *Grade A milk*.

18 licences to sell *Pasteurised milk*.

1 licence to *Pasteurise milk*.

The chemical and physical examination of milk.—During the year 264 samples of milk were taken for chemical analysis.

The bacteriological examination of milk.—218 samples of milk were examined in the Municipal Laboratory during the year. 193 of these samples were satisfactory and 25 were not satisfactory.

Suitable action was taken with regard to the unsatisfactory samples.

OTHER FOODS : DRUGS

Abattoirs in Birkenhead.—There are two public abattoirs in the Borough:—

- (a) the abattoir within the Woodside Lairages; and
- (b) the Corporation abattoir at Tranmere.

Meat inspection at Lairages and Abattoir.—The Veterinary Officer reports that during the year there were killed within the Borough 42,807 oxen, 1,488 calves, 94,136 sheep, 7,157 pigs; a total of 145,588; as set out in Table F 1.

TABLE F 1
Animals killed in Birkenhead during 1936

	Oxen	Calves	Sheep	Pigs	Total
At Woodside Lairages—					
Irish	28463	—	81142	1188	110793
Canadian	13841	—	—	—	13841
Manx	10	—	67	1	78
At Wallasey Stage and Nos. 4 and 5 Sheds—					
Irish	65	—	650	143	858
Canadian	—	—	—	—	—
Manx	—	—	6	—	6
At Tranmere Abattoir—					
Irish	8	—	471	—	479
Canadian	—	—	—	—	—
Home-fed	420	1488	11800	5825	19533
Totals	42807	1488	94136	7157	145588

All animals killed at Tranmere Abattoir, at Wallasey Stage, and Nos. 4 and 5 Sheds, Wallasey, and a considerable proportion of the animals killed at Woodside Lairages, were examined by the meat inspection staff.

The following is a summary of the meat, etc., condemned by the meat inspection staff at the lairages and abattoir during the year and surrendered by the owners for destruction. In no case was a formal seizure necessary:—

The total number of carcasses seized was 306, weighing 126,433 lbs. 186 of these were seized on account of tuberculosis; their aggre-

gate weight being 102,553 lbs. The remainder was seized on account of transit injuries, dropsy, sepsis, etc.

The number of parts of carcasses seized was 979, weighing 38,757 lbs.

Of these 736 were seized on account of tuberculosis; their aggregate weight being 36,588 lbs.

The total weight of offal seized was 198,039 lbs.

Inspection of meat and other foods at shops.—During the year 11,849 visits have been paid by the Inspectors to premises in the Borough. The total amount of foodstuffs condemned at the shops was 3,204 lbs.

Export of animal products.—During the year certificates were issued for the export of the following:—

to Spain—436 tierces of tallow;

to Poland—710 tierces of stearine.

21 tierces of tallow.

to Germany—15 tierces of beef casings.

to United States of America—1 barrel of sheep casings.

Sale of Food Order, 1921, Merchandise Marks Act, 1926, and Agricultural Produce (Grading and Marking) Act, 1928.—Attention was given to these Acts and Orders in so far as they relate to the sale of foodstuffs.

Slaughter of Animals Act, 1933.—Under the provisions of this Act it is required that all persons slaughtering animals in a slaughter-house or knackers yard must be over eighteen years of age and they must possess a slaughterman's licence granted by the Local Authority.

At the end of the year the names of 128 men to whom licences had been granted were entered on the register.

No contravention of the provisions of the Act occurred during the year.

Prosecutions.—During the year no legal proceedings were instituted.

Samples taken under Food and Drugs Acts.—During the year 519 samples were taken. Of these 268 were formal and 251 informal. 264 were samples of milk.

The articles sampled are set out in the following table:—

TABLE F 2
Samples taken during 1936

Article	No. samples taken formally	No. samples taken informally	Article	No. samples taken formally	No. samples taken informally
Milk	261	...	Barley .....	...	2
Skimmed milk	3	..	Yeast extract .....	...	1
Cream and tinned cream	10	Pepper .....	...	9
Condensed milk	7	Mustard .....	...	1
Butter	9	Pickles .....	...	4
Cheese and wrapped cheese	9	Sauce .....	...	5
Margarine	8	Vinegar .....	...	3
Lard	8	Gravy salt .....	...	1
Dripping	8	Stuffing .....	...	2
Tea	5	Baking powder .....	...	2
Coffee	8	Beef suet with rice flour .....	...	1
Cocoa	8	Glace cherries .....	...	5
Sugar	2	Ground ginger .....	...	2
Confectionery	13	Ground nutmeg .....	...	1
Biscuits	3	...	Almond oil .....	...	2
Jam	6	Olive oil .....	...	4
Honey	3	Pudding .....	...	2
Lemon cheese	2	Raisins .....	...	2
Treacle	1	Sultanas .....	...	2
Meat paste	3	Currants .....	...	2
Fish paste	5	Minced meat .....	...	2
Salmon creme	1	Figs and dates .....	...	2
Tinned meat	2	Candied peel .....	...	4
Tinned fish	5	Mineral water .....	...	2
Tinned fruit	1	Lemonade powders .....	...	3
Tinned peas	1	Camphorated oil .....	...	3
Potted meat	2	Glycerine .....	...	4
Potted fish	2	Boracic ointment .....	...	3
Meat pie	1	Petroleum jelly .....	...	1
Minced beef	8	Zinc ointment .....	...	3
Sausage rolls	2	Medicinal paraffin .....	...	1
Sausages	1	12	Tincture of iodine .....	...	1
Jelly	1	Aspirin tablets .....	...	3
Rice	3	Epsom salts .....	...	3
Sago	3	Seidlitz powder .....	...	2
Lentils	2			

Samples analysed formally 268

Samples analysed informally 251

Total samples analysed during the year... 519

Of the total number of samples analysed

3 samples of milk	1 sample of malt vinegar
4 samples of sausages	1 sample of camphorated oil
1 sample of lard	3 samples of biscuits
1 sample of tinned fish	3 samples of sago
	2 samples of rice

were reported adulterated, and proceedings were taken in respect of:—
2 samples of milk.

With reference to the remaining samples reported adulterated it was decided, after consideration of the circumstances, that it was inadvisable to institute proceedings.

Particulars of the defects found in those samples with regard to which proceedings were taken, and the result of the proceedings, are set out in Table F 3.

TABLE F 3

Samples with reference to which proceedings were taken

Nature of adulteration and result of proceedings

Date	Article	No. of sample	Adulteration	Fine inflicted or result
Mar. 27	Milk	56	7% deficient in fat..... .	Case dismissed
June 12	Milk	146	8% deficient in fat	Case dismissed

TUBERCULOSIS

ADMINISTRATIVE ARRANGEMENTS

The arrangements made by the Birkenhead Corporation for dealing with tuberculosis in the area include:—

(a) The provision of a dispensary or clinic, opened in 1913. (This clinic is used on one half-day each week in connection with cases from the area of the administrative county of Chester.)

(b) The provision of garden shelters for suitable cases at a small rent.

(c) The retention since August, 1914, of twelve beds at Leasowe Hospital for cases of surgical tuberculosis in children.

(d) A joint arrangement with the Cheshire County Council, and the Councils of the County Boroughs of Wallasey, Chester, Stockport and Stoke-on-Trent, for the provision of a sanatorium at Burntwood.

(e) The provision of a residential institution at Thingwall, Birkenhead.

(f) The treatment of tuberculous out-patients by artificial pneumothorax at the Birkenhead Municipal Hospital.

(g) The visitation of tuberculous in-patients at the Birkenhead Municipal Hospital by the Clinical Tuberculosis Officer.

(h) The provision of beds at the Birkenhead Municipal Hospital for intermediate, advanced, and observation cases of tuberculosis. (This provision is not made as an integral part of the Council's tuberculosis scheme.)

The Corkhill Fund.—Under the will of the late Mr. John Lloyd Corkhill, of Birkenhead, a sum of money was provided for the assistance of persons suffering from consumption. By arrangement with the trustees, persons applying for help from the charity are examined at the municipal clinic, where appropriate treatment is decided upon.

PREVALENCE OF, AND MORTALITY FROM, TUBERCULOSIS

Notifications.—The total number of primary cases of tuberculosis notified during 1936 was 232—176 respiratory and 56 non-respiratory. An analysis of these cases with reference to age and sex will be found in Table T 1 (page 23).

Mortality.—The total number of deaths, certified as due to tuberculosis, of patients who had previously been notified as suffering from the disease, was 115—105 respiratory and 10 non-respiratory.

The total number of deaths, certified as due to tuberculosis, of patients who had *not* previously been notified as suffering from tuberculosis was 15—13 respiratory and 2 non-respiratory.

Adding these together, the total number of deaths certified as due to tuberculosis was as follows:—

Respiratory	118
Non-respiratory	12
	<hr/>
	130

An analysis of the tuberculosis mortality for the past ten years will be found in Table T 2 (page 23).

An analysis of the tuberculosis mortality during 1936 with reference to age and sex will be found in Table T 3 (page 24).

Number of known cases.—After making deductions for patients who had died during the year, or who had permanently left the district, or whose names have been taken off the register as provisionally cured, the total number of known cases of tuberculosis in Birkenhead at the end of 1936 was as follows :—

	Adults	Children (under 15 years of age)	Total
Respiratory .....Male	385	38	423
Female ...	338	38	376
Non-respiratory Male	55	200	255
Female ...	79	197	276
Total...Male	440	238	678
Female ...	417	235	652
Total	857	473	1330

CASES DEALT WITH THROUGH THE TUBERCULOSIS CLINIC

Attendances of patients at the clinic.—During the year 2,104 examinations were made. Of these 833 were *first* examinations (*i.e.*, examinations of patients who had not been seen previously at the clinic).* In addition to attendances made for the purpose of medical examination, 697 other attendances were made by patients for weighing, interview, advice or certification, and by patients' relatives in connection with questions arising as to treatment, removal, home conditions, etc.

* This number includes contacts.

Examination of patients who were notified for the first time during 1936.—Of the 232 new patients notified in 1936, 155 were examined at the clinic during the year. The remaining 77 were not referred to, did not attend at, or had been previously examined at, the clinic.

Classification of new cases.—The 523 new patients who attended during the year were classified as follows:—

		*Adults	Children	Total
Classed as suffering from respiratory tuberculosis	{ Male ...	55	1	56
	{ Female ...	58	1	59
Classed as suffering from other forms of tuberculosis	{ Male ...	5	15	20
	{ Female ...	5	11	16
Classed as non-tuberculous	{ Male ...	88	102	190
	{ Female ...	114	54	168
Classed as "suspect"	{ Male ...	3	2	5
	{ Female ...	5	4	9
Total...	{ Male ...	151	120	271
	{ Female ...	182	70	252
Total.....		333	190	523

* All patients of fifteen years and upwards are classed as adults

Examination of contacts.—310 persons who had been in close contact with known cases of tuberculosis were examined either at the clinic or at their homes, and were classified as follows:—

		*Adults	Children	Total
Classed as suffering from respiratory tuberculosis	{ Male ...	4	—	4
	{ Female ...	1	—	1
Classed as suffering from other forms of tuberculosis	{ Male ...	—	2	2
	{ Female ...	—	—	—
Classed as non-tuberculous.....	{ Male ...	45	93	138
	{ Female ...	70	91	161
Classed as "suspect"	{ Male ...	—	3	3
	{ Female ...	—	1	1
Total...	{ Male ...	49	98	147
	{ Female ...	71	92	163
Total.....		120	190	310

* All patients of fifteen years and upwards are classed as adults.

HOME VISITING; DISINFECTION; COMPULSORY TREATMENT; ETC

During the year the health nurses paid 318 first visits and 3,226 re-visits to the homes of patients.

The number of houses disinfected after death or removal of patients was 93.

Spitting flasks are provided free of charge to patients.

The compulsory removal to hospital for a period not exceeding 3 months of a person suffering from pulmonary tuberculosis in an infectious state and whose condition is a danger to other members of the house is provided for by the Public Health Act, 1925 (Sec. 62).

The power to prevent a person suffering from tuberculosis of the respiratory tract from entering upon any employment or occupation in connection with a dairy which would involve the milking of cows, the treatment of milk, or the handling of vessels used for containing milk, is given to a Local Authority under the Public Health (Prevention of Tuberculosis) Regulations, 1925.

It was not found necessary during the year to make use of the above powers in Birkenhead.

THINGWALL SANATORIUM

Patients dealt with.—At the commencement of the year there were 31 patients in the Sanatorium. There were 84 admissions during the year. These were classified as follows:—

Tuberculosis of bones and joints	8
„ abdominal glands or peritoneum	8
„ cervical and other glands	16
„ other organs	1
For observation and diagnosis	51

81 patients were discharged or transferred to other institutions; no deaths occurred. The condition on discharge may be summarised as follows:—

Disease quiescent	26
Improved	11
No material improvement	3
Found after observation not to be suffering from tuberculosis	41

There were 34 patients under treatment at the end of the year.

Average duration of stay.—For the patients discharged during the year the average length of stay in the sanatorium was 20 weeks.

Treatment.—Cod liver oil has now been displaced by one of the vitamin A and D preparations with equally good results. The administration of drugs is kept to a minimum.

General notes.—With the decrease in the number of cases of non-pulmonary tuberculosis, it is possible to use the Sanatorium more largely for observation cases. Doubtful cases are admitted for observation for a period not exceeding two months; before the end of this time a definite diagnosis is made.

CHESHIRE JOINT SANATORIUM

The Cheshire Joint Sanatorium was opened on the 6th November, 1923, for 50% of the approved bed accommodation.

The approved accommodation for Birkenhead cases (32 beds) is now available.

Patients dealt with.—At the beginning of the year 32 Birkenhead patients were under treatment. During the year 33 Birkenhead patients were admitted, 31 were discharged, and 2 died; 32 patients remained under treatment at the end of the year.

	Men	Women	Children (under 15)	Total
In Sanatorium January 1, 1936	17	15	—	32
Admitted during year..	17	16	—	33
Discharged or left Sanatorium during year	17	14	—	31
Died in Sanatorium	—	2	—	2
In Sanatorium December 31, 1936 ...	17	15	—	32

The following table shows the classification, length of stay, and result of treatment of the cases discharged during the year:—

Classification prior to entering Sanatorium *	Condition on discharge from Sanatorium	DURATION OF STAY IN SANATORIUM								Totals	
		Under 3 months		3 to 6 months		6 to 12 months		Over 1 year			
		M	F	M	F	M	F	M	F	M	F
T. B. minus	Quiescent	—	—	—	—	—	—	—	—	—	—
	Improved	—	1	—	3	4	1	—	—	4	5
	No material improvement	—	—	1	—	—	—	—	—	1	—
	Died	—	—	—	—	—	—	—	—	—	—
T. B. plus Group I.	Quiescent	—	—	—	—	—	—	—	—	—	—
	Improved	—	—	1	—	—	1	—	—	1	1
	No material improvement	—	—	—	—	—	—	—	—	—	—
	Died	—	—	—	—	—	—	—	—	—	—
T. B. plus Group II.	Quiescent	—	—	—	—	—	—	—	—	—	—
	Improved	—	—	2	—	7	7	2	1	11	8
	No material improvement	—	—	—	—	—	—	—	—	—	—
	Died	—	—	—	—	—	—	—	—	—	—
T. B. plus Group III.	Quiescent	—	—	—	—	—	—	—	—	—	—
	Improved	—	—	—	—	—	—	—	—	—	—
	No material improvement	1	—	—	—	—	—	—	—	1	—
	Died	—	—	—	—	—	2	—	—	—	2

*Explanation of group nomenclature: Patients suffering from pulmonary tuberculosis are divided into groups which may briefly be defined as follows:—

T.B. minus=cases in which tubercle bacilli have never been demonstrated in the sputum, etc.

T.B. plus, Group I=cases in which tubercle bacilli have at any time been demonstrated with slight constitutional disturbance and where the physical signs are of very limited extent.

T.B. plus, Group II=all cases which are neither slight nor advanced and which cannot be placed in Group I. or III.

T.B. plus, Group III=cases with profound systemic disturbance or constitutional deterioration, marked impairment of function, either local or general, and with little or no prospect of recovery.

It should be noted that a patient originally in Group T.B. minus must be transferred to Group T.B. plus at any stage in the course of treatment if and when tubercle bacilli are found, while on the other hand a patient who is once placed in Group T.B. plus can never be transferred to Group T.B. minus.

A full explanation of the Groups will be found in Memorandum 37 T issued by the Ministry of Health in September, 1925.

NOTE.—One male adult was admitted for observation and discharged as non-tuberculous after two months' treatment in Sanatorium.

LEASOWE HOSPITAL

The twelve beds reserved by the Corporation at Leasowe Hospital for cases of *surgical tuberculosis* among Birkenhead residents have not been in full occupation throughout the year.

There were 10 cases in hospital at the beginning of the year; no new cases have been admitted during the year, and 5 have been

discharged or died; leaving 5 patients in hospital at the end of December.

The localisation of the disease in the 10 patients under treatment during the year was as follows:—

Tuberculosis of spine	—
„ hip	7
„ knee	2
„ hand	1
	—
	10
	—

The 5 cases discharged or died were as follows :—

Tuberculosis of hip	2	quiescent
„ knee	1	quiescent
„ hand	1	quiescent
„ knee	1	improved
	—	
	5	
	—	

BIRKENHEAD MUNICIPAL HOSPITAL

Dr. Foster, Clinical Tuberculosis Officer, has acted as Consultant Physician (Tuberculosis) to the Municipal Hospital throughout the year. He visits the hospital regularly, sees patients suffering from tuberculosis and advises treatment, etc.

Details of the methods of treatment used were given in my annual report for 1933.

A Continuation Clinic at the hospital was opened during 1934, and accommodation is provided for persons requiring artificial pneumothorax treatment.

Artificial pneumothorax treatment.—During 1936, 1,038 refills were given by Dr. Foster, including 23 primary inductions. This represents an increase of 165 refills over those given during 1935, and 10 more primary inductions. There were 916 screenings performed during the year.

X-ray examinations.—During the year 405 patients were sent from the Tuberculosis Clinic for X-ray examination at the Municipal Hospital, an increase of 128 over the number X-rayed during 1935.

TABLE T 1
New cases notified for first time during the year

PRIMARY NOTIFICATIONS												
Age periods.....	C-1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65 and up	Total
Respiratory—Male	—	—	1	3	10	13	15	16	26	11	2	97
Female	—	—	3	1	11	16	20	10	15	3	—	79
Non-respiratory—Male	—	6	14	3	4	2	5	—	2	—	—	36
Female ..	—	3	7	4	3	1	2	—	—	—	—	20
Total	—	9	25	10	28	32	42	26	43	14	2	232

TABLE T 2
Deaths from tuberculosis during the past ten years

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936
Deaths from tuberculosis of the lungs—										
Number	155	150	164	141	144	140	140	108	96	118
Rate per 1000	0.98	0.95	1.04	0.89	0.97	0.95	0.93	0.72	0.64	0.79
A Male—										
Number	97	82	93	83	83	72	86	62	68	63
Rate	0.61	0.52	0.58	0.52	0.55	0.48	0.57	0.41	0.45	0.43
B Female—										
Number	58	68	71	58	61	68	54	46	28	55
Rate	0.37	0.43	0.46	0.36	0.42	0.46	0.36	0.30	0.19	0.37
Deaths from other forms of tuberculosis—										
Number	45	43	39	29	36	29	22	28	13	12
Rate per 1000	0.28	0.27	0.24	0.18	0.24	0.19	0.14	0.18	0.09	0.08
A Male (all ages)										
Number	28	28	18	11	17	15	10	11	7	6
Rate	0.18	0.18	0.11	0.06	0.11	0.10	0.06	0.07	0.05	0.04
B Female (all ages)										
Number	17	15	21	18	19	14	12	17	6	6
Rate	0.10	0.09	0.13	0.11	0.13	0.09	0.08	0.11	0.04	0.04
C Children (un. 5 yrs)										
Number	22	21	19	8	22	6	7	8	2	1
Rate	0.13	0.13	0.12	0.05	0.14	0.04	0.04	0.05	0.01	0.00
Deaths from tuberculosis (all forms)—										
Number	200	193	203	170	180	169	162	136	109	130
Rate per 1000	1.26	1.22	1.29	1.07	1.21	1.14	1.08	0.90	0.73	0.88
Rate per 1000 England & Wales	0.97	0.93	0.96	0.89	0.89	0.83	0.82	0.76	0.72	0.68

TABLE T 3
New cases and mortality during 1936

Ages	*NEW CASES				DEATHS			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
0.....	—	—	—	1	—	—	—	1
1.....	—	—	6	6	—	1	—	1
5.....	1	3	15	7	—	1	2	—
10.....	3	2	3	5	1	1	—	1
15.....	10	11	5	4	2	10	2	2
20.....	15	16	2	1	2	4	—	1
25.....	17	23	5	3	14	15	1	—
35.....	19	10	—	—	13	5	—	—
45.....	28	15	2	—	16	12	1	—
55.....	15	4	—	—	12	4	—	—
65 and upwards.....	2	1	—	—	3	2	—	—
Totals... ..	111	85	38	27	63	55	6	6

* Includes all primary notifications and also all other new cases of tuberculosis which came to the knowledge of the Medical Officer of Health during the year.

VENEREAL DISEASES

ADMINISTRATIVE ARRANGEMENTS

The diagnosis and treatment of cases (males and females) of venereal diseases at the Municipal Clinic at the Birkenhead General Hospital has been carried on during the year by Dr. E. Blackstock.

Of the 428 new cases dealt with at the clinic, 236 were residents of Birkenhead, 45 were from Cheshire County, 1 from Liverpool, 23 from Wallasey, and 144 from India, Burma and Ceylon.

The in-patient treatment of persons suffering from venereal diseases is carried out at the Birkenhead Municipal Hospital.

At the special clinic for children held at No. 9, Hamilton Square, Dr. Blackstock has also been in attendance during the year. At this clinic the number of new cases seen during the year was 41 as compared with 25 in the previous year; the attendances numbered 688 as compared with 1,179.

GENERAL NOTES

Cases dealt with.—(a) General Hospital clinic. During the year 841 persons, comprising 585 males and 256 females, were dealt with at the clinic as out-patients.

This represents an increase of 50 males and a decrease of 23 females as compared with the respective numbers for 1935.

The total attendances of out-patients was 10,893, 2,831 being in respect of non-Birkenhead residents. The number of in-patient days was 390.

New patients numbered 333 males and 95 females; of these 192 were non-residents of Birkenhead. As is usual in seaports sailors of many nationalities were treated at the clinic. Natives of Denmark, Finland, Greece, Holland, Norway, Russia, India, Burma and Ceylon attended during the year.

(b) Hamilton Square clinic.—During the year 160 children (89 males and 71 females) were dealt with at the clinic as out-patients, the total attendances made being 688.

The new cases seen numbered 41, and were diagnosed as follows:—

Syphilis (congenital in all cases)	6
No venereal disease	35

Bacteriological work.—(a) 933 smears were examined at the municipal laboratory for the presence of gonococci, and 28 specimens for the detection of *treponema pallida* were examined at the municipal clinic at the General Hospital.

Lumbar puncture was performed on 25 patients and 50 specimens of fluid obtained; 25 being sent to the Municipal Laboratory and 25 to the Liverpool University for examination.

(b) At the University of Liverpool, 2,096 specimens were examined for the Wasserman reaction, 597 of these being sent from the municipal clinic at the General Hospital, 63 from the Hamilton Square clinic, and

1,434 from private medical practitioners and hospitals in the area ; and 145 serum tests for gonorrhœa were also carried out.

Issue of arsenobenzene compounds.—Arsenobenzene compounds were issued during the year by the Medical Officer of Health

to the Medical Officer of the treatment centres at the General Hospital and at No. 9 Hamilton Square ;

to the Medical Superintendent, Birkenhead Municipal Hospital.

and to 4 approved general medical practitioners.

TABLE V I

Statement showing the services rendered at the Venereal Diseases Clinic at the Birkenhead General Hospital during the year, classified according to the diseases dealt with

	Syphilis		Soft chancre		Gonorrhœa		Conditions other than venereal		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T's.
1. Number of cases on 1st January undertreatment or observation	123	98	5	—	86	46	2	7	216	151	367
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection	3	6	—	—	4	1	—	—	7	7	14
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from—											
Syphilis, primary	12	1	—	—	—	—	—	—	12	1	13
„ secondary	3	—	—	—	—	—	—	—	3	—	3
„ latent in 1st year of infection	4	3	—	—	—	—	—	—	4	3	7
„ all later stages	38	22	—	—	—	—	—	—	38	22	60
„ congenital	1	5	—	—	—	—	—	—	1	5	6
Soft chancre	—	—	13	—	—	—	—	—	13	—	13
Gonorrhœa, 1st year of infection	—	—	—	—	119	23	—	—	119	23	142
„ later	—	—	—	—	13	3	—	—	13	3	16
Conditions other than venereal	—	—	—	—	—	—	130	38	130	38	168
4. Number of cases dealt with for the first time during the year under report known to have received treatment for the same infection, or to have been under observation at other centres	12	1	2	—	15	2	—	—	29	3	32
Total of Items 1, 2, 3 and 4 ...	196	136	20	—	237	75	132	45	585	256	841
5. Number of cases discharged after completion of treatment and final tests of cure or after diagnosis as non-venereal ...	1	—	—	—	11	1	110	34	122	35	157
6. Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from:—											
Syphilis, primary	5	—	—	—	—	—	—	—	5	—	5
„ secondary	1	—	—	—	—	—	—	—	1	—	1
„ latent in 1st year of infection	3	—	—	—	—	—	—	—	3	—	3
„ all later stages	20	53	—	—	—	—	—	—	20	53	73
„ congenital	5	5	—	—	—	—	—	—	5	5	10
Soft chancre	—	—	1	—	—	—	—	—	1	—	1
Gonorrhœa, 1st year of infection	—	—	—	—	34	33	—	—	34	33	67
„ later	—	—	—	—	7	5	—	—	7	5	12
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure	7	1	—	—	25	6	—	—	32	7	39
8. Number of cases transferred to other centres or to institutions, or to care of private practitioners	54	2	10	—	62	6	11	5	137	13	150
9. Number of cases remaining under treatment or observation on 31st December	100	75	9	—	98	24	11	6	218	105	323
Total of Items 5, 6, 7, 8 and 9 (These totals should agree with those of Items 1, 2, 3 and 4)	196	136	20	—	237	75	132	45	585	256	841

TABLE V I—(continued)

	Syphilis		Soft Chancre		Gonorrhœa		Conditions other than venereal		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T'ls.
10. Number of cases in the following stages of syphilis included in Item 6 which failed to complete one course of treatment—											
Syphilis, primary	—	—	—	—	—	—	—	—	—	—	—
" secondary	—	—	—	—	—	—	—	—	—	—	—
" latent in 1st year of infection.....	—	—	—	—	—	—	—	—	—	—	—
" all later stages ..	6	17	—	—	—	—	—	—	6	17	23
" congenital	—	1	—	—	—	—	—	—	—	1	1
11. Number of attendances —											
(a) For individual attention of the medical officers	1226	1153	59	—	1326	319	418	231	3029	1703	4732
(b) For intermediate treatment, e.g. irrigation, dressing.....	69	54	2	—	5588	210	165	73	5824	337	6161
Total attendances...	1295	1207	61	—	6914	529	583	304	8853	2040	10893
12. In-patients —											
(a) Total number of persons admitted for treatment during the year	5	—	—	—	2	1	—	—	7	1	8
(b) Aggregate number of "in-patient days" of treatment given.	251	—	—	—	33	106	—	—	284	106	390
13. Number of cases of congenital syphilis in item 3 above classified according to age periods											
	Under 1 year		1 and under 5 years		5 and under 15 years		15 years and over		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
	—	—	—	1	—	—	1	4	1		5

	Arsenical		Mercury	Bismuth
	Approved Arsenobenzene Compounds	Others		
14.—				
(a) Names of chief preparations used in the treatment of syphilis ...	Stabilarsan Kharsulphan Neokharsivan Silver Salvarsan	Tryparsamide Acetylarsan		Bismostab Bisoxyl Guinostab
(b) Total number of injections given (out - patients and in-patients)	1096	77	—	1327

	Microscopical		Cultural for Gonorrhoea	Serum		Cerebral Spinal Fluid	Others for Diagnosis of Venereal Disease
	For Syphilis	For Gonorrhoea		For Syphilis	For Gonorrhoea		
15.—							
Pathological Work :							
(a) Number of specimens examined at, and by the Medical Officer of, the Treatment Centre ...	28	933	—	—	—	—	—
(b) Number of specimens from patients attending at the Treatment Centre sent for examination to an approved laboratory ...	—	—	—	597	145	25	—

OTHER INFECTIOUS DISEASES

INFECTIOUS DISEASES WHICH ARE NOTIFIABLE

The infectious diseases which (in addition to tuberculosis, already dealt with) were compulsorily notifiable to the Medical Officer of Health at any time during the past year are set out in Tables I 1 and I 2 below.

TABLE I 1

Infectious diseases other than tuberculosis notified during 1936:
showing seasonal incidence

Disease	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet fever	33	17	33	21	20	9	13	12	19	23	39	31	270
Diphtheria and membranous croup	39	28	23	22	17	24	19	11	12	12	33	51	291
Erysipelas	7	9	5	8	11	5	4	4	2	5	2	8	70
Typhus fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid fever	—	—	—	—	1	—	—	—	2	—	—	—	3
Continued fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Relapsing fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-spinal meningitis	1	—	—	1	—	—	—	—	—	—	—	—	2
Encephalitis lethargica (acute)	—	—	—	—	—	—	—	—	—	—	—	—	—
Polio-encephalitis (acute)	—	—	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis (acute)	—	—	—	—	1	3	—	1	—	—	—	—	5
Puerperal pyrexia	—	5	7	2	3	5	1	1	—	—	4	2	30
Puerperal fever	—	—	—	—	—	—	—	1	—	—	—	—	1
Ophthalmia neonatorum	1	—	—	—	—	3	2	1	—	—	1	—	8
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	20	28	32	28	15	20	13	10	15	22	8	29	240
Malaria	—	—	—	—	—	—	—	1	—	—	—	—	1
Dysentery	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	101	87	100	82	68	69	52	42	50	62	87	121	921

TABLE I 2

Infectious diseases other than tuberculosis notified during 1936;
showing ages

Disease	and 1 yr.	1-2 yrs.	2-3 yrs.	3-4 yrs.	4-5 yrs.	5-10 yrs.	10-15 yrs.	15-20 yrs.	20-35 yrs.	35-45 yrs.	45-65 yrs.	65 yrs. up	Total
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet fever	1	6	20	20	21	132	38	9	18	2	3	—	270
Diphtheria and membra- nous croup	4	13	23	24	23	125	48	13	12	5	—	1	291
Erysipelas	1	2	1	—	—	—	3	4	14	6	22	17	70
Typhus fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid fever	—	—	—	1	—	—	—	—	2	—	—	—	3
Continued fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Relapsing fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-spinal meningitis	—	—	—	—	—	1	—	1	—	—	—	—	2
Encephalitis lethargica (acute)	—	—	—	—	—	—	—	—	—	—	—	—	—
Polio-encephalitis (acute)	—	—	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis (acute) ..	—	1	2	—	2	—	—	—	—	—	—	—	5
Puerperal pyrexia	—	—	—	—	—	—	—	1	24	5	—	—	30
Puerperal fever	—	—	—	—	—	—	—	—	1	—	—	—	1
Ophthalmia neonatorum	8	—	—	—	—	—	—	—	—	—	—	—	8
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	12	20	9	14	14	24	13	11	37	28	36	22	240
Malaria	—	—	—	—	—	—	—	—	1	—	—	—	1
Dysentery	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	26	42	55	59	60	282	102	39	109	46	61	40	921

Case-rates of certain diseases.—The case-rates of certain diseases for Birkenhead, and for England and Wales, per 1,000 living, are set out below:—

	Case-rate per 1,000 living	
	Birkenhead	England and Wales
Smallpox	—	0.00
Scarlet fever	1.82	2.53
Diphtheria	1.96	1.39
Enteric fever	0.02	0.06
Erysipelas	0.47	0.40
Pneumonia	1.62	1.11

Cerebro-spinal fever.—Two cases were notified during the year.

Smallpox.—No cases of smallpox were notified in Birkenhead during the year.

Twelve cases of smallpox were notified in England during the year; the patients recovered.

DISINFECTION

Books.—138 Public Library books were collected from infected houses and disinfected.

Dwellings.—449 house-disinfecting notices were served; 461 houses or parts of houses were disinfected during the year.

Bedding and clothes.—Infected bedding and clothes were collected from 595 dwellings and disinfected. In 26 further cases infected or discarded bedding and clothes were destroyed.

Visits and revisits paid to houses, etc., by the Infectious Diseases Inspector.—2,916 visits and revisits to property were made during the year in connection with disinfection after infectious diseases (including tuberculosis).

VACCINATION

Public vaccination.—Information relative to the number of persons successfully vaccinated and re-vaccinated at the cost of the rates by the Public Vaccinators and by the Medical Superintendent of the Birkenhead Municipal Hospital and Public Assistance Institution during the year ended 30th September, 1936, is given below :—

Name of District	Name of Medical Officer or Public Vaccinator	No. of successful primary vaccinations of persons :—			No. of successful re-vaccinations, i.e., of persons who had been successfully vaccinated at some previous time
		Under 1 year of age	1 year and upwards	Total	
Birkenhead	Dr. H. C. Pierce	549	4	553	4
Tranmere (and Prenton)	Dr. H. L. Pearson (Died 14/9/1936) Dr. R. W. L. Pearson (Acting from 14/9/1936)	446	19	465	5
Birkenhead Municipal Hospital and Institution	Dr. R. A. Grant	6	3	9	—
Total ..		1,001	26	1,027	9

The following is the latest completed information relative to vaccination in the Borough and relates to children whose births were registered from 1st January to 31st December, 1935, inclusive, viz. :—

	Birkenhead District	Tranmere District	Prenton District	Whole Borough
No. of births	1,432	1,223	74	2,729
Successfully vaccinated	699	647	34	1,380
Insusceptible of vaccination	4	10	1	15
Had smallpox.....	—	—	—	—
Number in respect of whom statutory declarations of conscientious objection have been received	424	352	29	805
Died unvaccinated	90	55	2	147
Postponements, removals, or cases not found, etc.	215	159	8	382
Total No. of certificates and copies of certificates of successful primary vaccination of children under 14 received during the calendar year 1936	718	834	—	1,552
No. of statutory declarations of conscientious objection actually received by the Vaccination Officers irrespective of the dates of birth of the children to which they relate during the calendar year 1936	431	382	—	813
No. of cases successfully vaccinated after the declaration of conscientious objection had been made	—	—	—	—
No. of copies of certificates of successful primary vaccination sent to Vaccination Officers of other districts during 1936 ...	21	39	—	60

Public Health (Smallpox Prevention) Regulations, 1917.—No primary vaccinations or revaccinations were performed by the Medical Officer of Health during the year.

ISSUE OF DIPHTHERIA ANTITOXIN

During the year, in accordance with the provisions of the Diphtheria Antitoxin (outside London) Order, 1910, diphtheria antitoxin was issued to 2 medical practitioners; a total of 32,000 units was given out.

IMMUNISATION AGAINST DIPHTHERIA.

(a) Children attending Infant Welfare Clinics

Since 1926 facilities have been offered to the mothers attending the infant welfare clinics to have their children immunised against diphtheria.

During the year ended 31st December, 1936, 53 children were presented at the various clinics for the first of a course of immunising injections. Of these, 43 completed the course before the end of the year, 6 had 2 injections, and 4 had 1 injection. In addition, 4 children whose treatment was commenced in 1935 were given their final injections, making a total of 47 children completing the course in 1936.

Children who have received less than 3 injections cannot be said to have full opportunity of complete immunisation. Experience

indicates that about 80% of cases who have had a full course will be immune, while the remaining 20% may require a further short course of treatment.

Details of treatment carried out in 1936 are set out below :—

Clinic	1 injection	2 injections	3 or more injections	Total	1935 cases completed	Total
Hamilton Square	3	2	8	13	2	15
North	—	—	15	15	1	16
South	—	3	7	10	1	11
Mount Grove	1	1	13	15	—	15
Total	4	6	43	53	4	57

(b) Children attending schools in the Borough

The immunisation against diphtheria of children attending school has been continued during the year at the school clinics, but no special sessions were held at the clinics or in the schools. (It will be remembered that, during 1935, special arrangements were made for the immunisation of school children in the Borough, and over 5,000 received a complete course).

The following table shows the work done during the year :—

Place where immunisation was carried out	No. of children who received		No. of children who completed the course, i.e. 3 injections	Total
	1 injection	2 injections		
North Health Clinic.....	....	2	2	4
South Health Clinic .....	....	3	17	20
Hamilton Square Health Clinic	6	5	28	39
Totals....	6	10	47	63

In addition to the above 12 Birkenhead children who were inmates of the Liverpool Open-air Hospital at Leasowe received a full course of 3 injections.

(c) Staff, patients, etc., at the Isolation Hospital

The immunisation of members of the staff at the Isolation Hospital, and of patients admitted suffering from diseases other than diphtheria, has been continued. In addition, other children (*e.g.*, the brothers and sisters of patients) have been immunised at the request of parents. The following table shows the work done at the hospital during the year 1936. This work is also carried on at the school and child welfare clinics.

	1 injection	2 injections	Completely Im- munised, i.e. course of 3 injections	Total	1935 cases completed	Total
Staff .....	...	...	8	8	...	8
Patients {	Over 15.....	...	4	4	...	4
	15 & under.....	4	62	66	...	66
Totals .....	...	4	74	78	...	78

(It is now the practice at the hospital to immunise patients and the members of the staff irrespective of Schick testing.)

HOME NURSING

The arrangement made between the Corporation and the Birkenhead District Nursing Society, dating from 1st July, 1919, provides for the home nursing of cases of influenza and pneumonia. During the year 1936 the Society's nurses paid 1,353 visits in respect of 80 cases.

INFECTIOUS DISEASES HOSPITAL

Cases treated during 1936.—At the beginning of the year there were 45 patients in the Infectious Diseases Hospital.

During the year there were 602 patients admitted to the wards, so that the total number of cases treated during 1936 was 647. The total number of in-patient days in respect of the cases admitted was 19,563 or 32.5 per patient.

There were 526 discharges and 35 deaths during the year; leaving 86 patients in hospital on 31st December, 1936.

The diseases treated, together with the sex of the patients and particulars as to recoveries and deaths, are shown below:—

TABLE I 3

Patients sent in as suffering from	In hospital at beginning of year	Admitted during year	Died during year	Discharged during year	Remaining in hospital at end of year
Scarlet fever .....M.	11	117	3	107	18
.....F.	12	120	1	122	9
Diphtheria.....M.	5	136	9	103	29
.....F.	9	151	10	120	30
Enteric fever .....M.	...	1	...	1	...
.....F.	...	1	...	1	...
Cerebro-spinal fever .....M.	...	1	1	...	...
.....F.	...	...	...	...	...
Erysipelas .....M.	..	5	...	5	...
.....F.	...	3	...	3	...
Measles .....M.	4	22	6	20	...
.....F.	3	28	4	27	...
Whooping cough .....M.	...	3	1	2	...
.....F.	...	3	...	3	...
Other diseases .....M.	1	4	...	5	...
.....F.	...	7	...	7	...
Totals	45	602	35	526	86

Diphtheria.—The type of diphtheria in the earlier months of the year was less severe, but was more severe in the ensuing months. The value of immunisation has been strikingly demonstrated—the percentage of previously immunised patients admitted with true diphtheria was fractional.

Of 287 cases admitted to the diphtheria wards, 183 were finally diagnosed as suffering from diphtheria. The addition of 1 case admitted erroneously diagnosed as scarlet fever brings the diphtheria total to 184.

Of the remainder 18 were “carriers” and 85 were found to be suffering from diseases other than diphtheria or from no disease. The corrected diagnoses in these cases were as follows: tonsillitis (66), laryngitis (5), quinsey (3), bronchitis (3), measles (1), scarlet fever (1) and no disease (6).

There were 15 deaths ascribed to diphtheria. The mortality calculated on actual clinical cases was 8.2%.

Of the cases found not to be suffering from diphtheria four died—one a male aged 1½ years, suffering from empyema, and three females aged 1 year, 1 year and 2 years respectively, suffering from broncho-pneumonia.

Of the 15 cases dying of diphtheria, 6 died within 24 hours of admission.

18 cases were admitted suffering from laryngeal obstruction. Of these, 2 died. The operation of tracheotomy was performed in 7 of these cases.

Tonsillectomy.—It was found unnecessary to perform this operation on any of the carriers encountered in the course of the year.

Duration of illness before admission to hospital.—The average duration of illness before admission was 3.2 days.

Days in hospital.—The average length of stay in hospital of all cases suffering from diphtheria was 37.05 days.

Table showing age and sex of diphtheria patients:—

Age-period in years		0-1 yrs.	1+ yrs.	2+ yrs.	3+ yrs.	4+ yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-29 yrs.	30-39 yrs.	40+ yrs.	Totals
Recovered or still in Hospital	M.	...	7	8	12	10	60	22	3	2	2	1	127
	F.	2	5	10	6	14	57	28	7	7	5	...	141
Died	M.	2	2	1	...	2	...	1	1	...	...	...	9
	F.	1	1	3	3	1	1	...	...	..	...	...	10
Totals ...		5	15	22	21	27	118	51	11	9	7	1	287

Hospital death-rate 6.6 per cent.

Scarlet fever.—There was no alteration in the type of scarlet fever as compared with the preceding year; the disease being mild in character. Only one death occurred from the disease in the hospital.

During the year there were 237 cases admitted to the hospital notified as suffering from scarlet fever. The diagnosis was confirmed in 208 cases. The addition of 1 case erroneously diagnosed as suffering from diphtheria brings the total to 209.

The corrected diagnoses in the 28 mis-diagnosed cases were as follows: tonsillitis (7), erythema (6), measles (4), whooping cough (4), diphtheria (1), German measles (1), and no disease (5). One patient required a mastoid operation.

There was one death from scarlet fever—a male aged 4 years. The case mortality was 0.4%.

The following are the principal complications which were noted:—

Late adenitis	12 cases or 5.0 per cent.
Otitis media	3 „ 1.3 „
Rhinitis	18 „ 7.6 „
Arthritis	4 „ 1.7 „
Otorrhœa	6 „ 2.5 „
Tonsillitis	6 „ 2.5 „
Albuminuria	4 „ 1.7 „

The average length of stay in hospital of cases of scarlet fever discharged cured during the year was 27.5 days.

Table showing age and sex of scarlet fever patients:—

Age-period in years		0-1 yrs.	1+ yrs.	2+ yrs.	3+ yrs.	4+ yrs.	5-9 yrs.	10-14 yrs.	15-19 yrs.	20-29 yrs.	30-39 yrs.	40+ yrs.	Totals
Recovered or still in Hospital	M.	1	4	12	12	8	53	16	3	5	2	...	116
	F.	...	3	9	8	10	61	14	4	8	1	2	120
Died	M.	...	...	...	...	1	...	...	...	...	...	...	1
	F.	...	...	...	...	...	...	...	...	...	...	...	—
Totals ..		1	7	21	20	19	114	30	7	13	3	2	237

Hospital death-rate 0.4 per cent.

In recent years very few cases have been classed as “return” cases. In 1936 there were no cases which were regarded as “return” cases.

During the year the practice of restricting the administration of antitoxin serum to severe and complicated cases has been continued.

Measles.—50 cases were admitted during the year and the diagnosis was confirmed in all of the cases. There were ten deaths from measles with broncho-pneumonia. In one case, a female aged 2½ years had tracheotomy performed.

Table showing age and sex of measles patients:—

Age-period in years		0-1 yrs.	1+ yrs.	2+ yrs.	3+ yrs.	4+ yrs.	5-9 yrs.	10-14 yrs.	15-20 yrs.	20+ yrs.	Totals
Recovered or still in Hospital	M.	1	5	3	...	...	2	4	...	1	16
	F.	3	1	1	5	4	7	...	1	2	24
Died	M.	1	4	1	...	...	...	...	...	..	6
	F.	1	...	3	...	...	...	...	...	...	4
Totals ...		6	10	8	5	4	9	4	1	3	50

Hospital death-rate 20 per cent.

The complications noted were:—

Broncho pneumonia 10 cases or 20 per cent.

Otitis media 7 ,, 14 ,,

Enteritis 2 ,, 4 ,,

Adenitis 1 ,, 2 ,,

Laryngitis 1 ,, 2 ,,

The average duration of illness before admission to hospital was 3.4 days.

The average length of stay in hospital of cases discharged cured was 25.06 days.

Erysipelas.—There were 8 cases admitted to the wards notified as suffering from erysipelas. The diagnosis was confirmed in 7 of the cases. The other case was suffering from cellulitis. All the cases recovered.

The majority of the cases were facial in origin.

Table showing age and sex of erysipelas patients:—

Age-period in years		0-1 yrs.	1+ yrs.	2+ yrs.	3+ yrs.	4-9 yrs.	10-14 yrs.	15-19 yrs.	20-29 yrs.	30-39 yrs.	40-49 yrs.	50-59 yrs.	60-69 yrs.	70+ yrs.	Tot- als
Recovered or still in Hospital	M.	...	...	...	...	...	1	1	1	...	1	1	...	...	5
	F.	...	...	...	...	..	...	..	1	..	2	...	...	...	3
Died	M.	...	...	...	...	..	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...		...	...	...	...	...	1	1	1	1	1	3	...	..	8

Hospital death-rate 0.0 per cent.

Enteric fever.—The diagnosis of enteric fever was confirmed in 2 cases admitted to the wards notified as suffering from this disease.

The infecting organism in the confirmed cases was paratyphosus B. Both these cases recovered.

Other Diseases.—*Whooping cough*.—There were 6 patients admitted to the wards suffering from whooping cough, the diagnosis being confirmed in 4 cases; the remaining 2 cases were diagnosed as suffering from malnutrition. One patient died from whooping cough.

Anterior poliomyelitis.—2 females, aged 17 years and 4 years, were admitted and discharged cured.

Cerebro-spinal meningitis.—1 male, aged 7 years, was admitted and died.

Rubella.—6 cases were admitted and discharged cured.

Chickenpox.—4 cases were admitted and discharged cured.

Hospital accommodation.—The existing cubicle accommodation at the hospital proved inadequate throughout the year. The Health Committee had under consideration the question of increasing the accommodation at the hospital, and an application to the Ministry of Health for approval to the erection of an additional cubicle pavilion will be made early in the coming year.

Staff.—During the year Dr. R. Sandilands acted as Resident Medical Officer. The general health of the staff was satisfactory. Tests for susceptibility to scarlet fever were unnecessary, as all newcomers to the staff had already had the disease.

Training of nurses.—Courses of instruction for the examinations of the General Nursing Council have been maintained continuously throughout the year. Of the 6 nurses who passed the preliminary examination in 1935 five presented themselves for the final examination in 1936—four of them passed. Six nurses sat the preliminary examination and six of them passed.

E. P. Smith memorial fund.—No patients received assistance from this fund during the year.

CANCER

The Minister of Health requests that a detailed statement should be furnished as to the facilities available in, or for, the area for the diagnosis and treatment of cancer, together with the deaths from cancer shown by age distribution.

Leaflets stressing the importance of securing early treatment are distributed from time to time at the various clinics maintained by the Local Authority.

Patients suffering from cancer are admitted to the Birkenhead Municipal Hospital, Church Road, Birkenhead. Operative facilities are provided but there are no facilities for deep X-Ray therapy or for treatment by radium.

There is no out-patient department at the hospital, but there is a Continuation Clinic which is used for " follow up " cases.

No arrangements have been made by the Council, under a specific agreement or otherwise, for treatment at other hospitals of cancer patients for whom adequate treatment facilities are not available in the Municipal Hospital. Suitable cases for X-radiation and radium are, however, referred through their own medical practitioners to the Radium Institute, Liverpool.

Below is a table showing the number of Birkenhead residents dealt with in the Municipal Hospital during the year :—

SITES	Patients admitted after previous advice or treatment at another hospital providing radiation as well as operative treatment .. 9		Patients admitted after previous advice or treatment at another hospital providing operative but not radiation treatment .. 14		Patients admitted without previous advice or treatment at another hospital .. 86	
	(a) Numbers treated at that hospital	(b) Numbers not treated at that hospital	(a) Numbers retained in Council's hospital	(b) Numbers referred for advice and/or treatment to a hospital providing radiation treatment	(a) Numbers retained in Council's hospital	(b) Numbers referred for advice and/or treatment to :- (i) Hospital providing operative treatment (ii) Hospital providing radiation as well as operative treatment
Uterus.....	3	...	1	1	4	...
Tongue and Mouth..	3	...	...	1	2	1
Breast	1	..	2	...	3	3
Lip	1	...	...	...	...	..
Skin .....	...	...	...	...	...	...
Larynx .....	...	...	...	...	...	...
Bladder .....	...	...	...	...	...	...
Rectum .....	...	...	1	...	6	...
Other sites	1	...	3	...	67	...
Total.....	9	...	7	2	82	4

The number of deaths from cancer of Birkenhead residents during the year, classified according to age and sites of the disease, is shown below:—

SITES	0-1	1-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	65 +	Total
Buccal Cavity and Pharynx	1	7	12	20
Digestive Organs and Peritoneum	2	6	20	40	78	146
Respiratory Organs.....	1	5	9	1	16
Uterus	1	5	4	4	3	17
Other Female Genital Organs	3	3
Breast	1	5	2	4	12
Male Genito-Urinary Organs....	1	...	...	...	...	1	4	5	11
Other or Unspecified Organs	1	...	...	...	1	3	4	2	5	16
Total.....	1	1	...	...	4	16	40	68	111	241

The following table shows the cancer death-rate in Birkenhead since 1921 as compared with the country generally :—

Year	BIRKENHEAD			ENGLAND AND WALES
	Population	Number of deaths from cancer in Birkenhead	Rate per 100,000 population	Rate per 100,000 population
1921	147,800	186	125	121
1922	149,200	172	115	123
1923	151,400	179	118	127
1924	154,100	179	116	130
1925	155,500	199	129	133
1926	158,000	204	129	136
1927	158,500	206	130	137
1928	159,200	229	145	142
1929	157,600	214	136	143
1930	157,600	228	144	145
1931	148,500	206	138	148
1932	147,700	197	133	151
1933	151,060	208	138	153
1934	150,100	235	156	156
1935	149,400	235	157	158
1936	148,000	241	163	162

It should be pointed out that in the above table no correction is made for age. Owing to the fact that a larger proportion of people are now living into the later age periods, that is to say into the age periods when cancer is much more prevalent, the increase in the cancer risk, while definite, is much less than would appear from the above figures.

MUNICIPAL LABORATORY

ADMINISTRATIVE ARRANGEMENTS

Dr. J. Morrison Ritchie has been in charge of the work carried out at the Municipal Laboratory throughout the year. The staff consists of Dr. Ritchie as Bacteriologist, one senior and two junior laboratory assistants, and one clerk.

The work carried out for the Infectious Diseases Hospital, Thingwall Sanatorium, and Birkenhead Municipal Hospital includes general bacteriological, pathological and biochemical examinations; ward visits; lectures to nurses, and consultations with medical staff.

The bacteriological supervision of the Borough water supplies is carried out at the laboratory. Food poisoning outbreaks are investigated. Clinical material from suspected cases of enteric, tuberculosis, typhus, anthrax, diphtheria, etc., is examined. The milk supply of the Borough is kept under careful observation.

In addition to the examinations carried out for the County Borough of Birkenhead, the work of the Laboratory now includes the bacteriology, biochemistry, and pathology for Clatterbridge (County) General Hospital and Leasowe Open-air Hospital, and the bacteriological examinations for the Bebington Urban Sanitary Authority.

EXAMINATIONS CARRIED OUT AT THE LABORATORY

Examination of Clinical Material.—The nature and number of examinations of clinical material made at the municipal laboratory during 1936 are shown in the following table :—

Examination	Total
Sputa for B. tuberculosis (291 positive)	1758
Cultures for B. diphtheriæ (329 positive)	3510
Diphtheria virulence tests (1 positive)	19
Blood tests (Widal) against enterica group (7 positive) ...	62
Urine for B. typhosus	6
Faeces for B. typhosus	6
Smears for gonococci (274 positive)	967
General examinations (1) Bacteriology	3297
(2) Biochemistry	1887
(3) Pathology	2032
Vaccines issued	60
Milk, graded, bacterial counts of	219
Milk, samples for tubercle bacilli (35 positive)	324
Milk, other examinations	1
Water examinations	117
Total	14265

Bacteriological examinations of water.—Examinations of the Alwen water supply were carried out at the laboratory during the year; 85 complete bacteriological examinations were made, samples being taken from the mains, and from the Alwen reservoir before and immediately after filtration. In addition, 20 specimens from the public baths and 12 from other sources were examined.

Bacteriological examination of milk.—(a) *The general bacteriological examination of graded milks.*—During the year the regular bacteriological examination of graded milks was carried out. 219 samples were examined. The work is undertaken primarily because of the introduction into the Borough of “designated milks” as laid down in the Milk (Special Designations) Order, 1936. These milks are :—

- (1) “Tuberculin Tested” and “Tuberculin Tested (Certified).”
- (2) “Accredited.”
- (3) “Tuberculin Tested (Pasteurised).”
- (4) “Pasteurised.”

These examinations are carried out for the Corporation, who grant the licences for the retailing of these classes of milk.

(b) *The general bacteriological examination of ungraded milk.*—Samples of ungraded milk have been examined from time to time, but no routine examination is carried out on ordinary milk, for which no standard of bacteriological purity has been laid down.

The routine examination of ordinary milk is very valuable, inasmuch as it is this milk which forms the principal supply of a very large section of the community.

(c) *The examination of ungraded milk for tubercle bacilli.*—During 1936, 324 samples of ungraded milk were examined for tubercle bacilli.

Out of these 324 samples living tubercle bacilli were found in 35. After making allowance for duplicates this means that **living tubercle bacilli were found in over 10 per cent. of the samples examined.** As much of the tuberculosis found in children is due to such milk, the importance of this branch of the work can hardly be over-emphasised.

It has been found necessary to curtail this branch of the work, which, in view of its extreme importance, is regrettable. It is hoped, however, that during 1937 it will be possible to restore this section to normal.

(d) *The examination of dried milk for tubercle bacilli.*—Samples of dried milk issued at the municipal clinics are periodically examined at the laboratory with a view to the detection of the presence of living tubercle bacilli.

The following routine procedure is followed with regard to the bacteriological examination of milk.

(a) *General bacteriological examination*

This consists of:—

- (a) The enumeration of the micro-organisms present per cubic centimetre.
- (b) Examination for the presence of *B. coli* in specified quantities of milk.

1. *Graded liquid milks*

Each supply is examined twice in a year—once in the first half year and once in the second half year. In connection with pasteurised milk produced by a firm in the Borough, one sample is examined monthly.

2. *Ungraded liquid milks*

Samples are examined from time to time but not at regular intervals. It is intended that this work should be developed when adequate laboratory accommodation is provided.

(b) *Examination for tubercle bacilli*

This consists of an examination by biological experiment to ascertain whether living tubercle bacilli are present.

1. *Graded liquid milks*

Each supply is examined twice in a year—once in the first half year and once in the second half year. In connection with pasteurised milk produced by a firm in the Borough, one sample is examined monthly.

2. *Ungraded liquid milks*

Milk from each source of supply is examined twice in a year—once in the first half year and once in the second half year.

3. *Dried milks*

Two samples from each source are examined annually, one in the first half year and one in the second half year.

Typhoid and paratyphoid.—Typhoid and paratyphoid B. were both present in Birkenhead during the year.

Food poisoning.—No cases of food poisoning were confirmed by the Laboratory during the year. Some specimens of suspected foods were examined during the summer, but with negative results.

Streptococcal infections.—As was mentioned in my report for 1933, streptococcal infections occur frequently among the general population. In conjunction with the Infectious Diseases Hospital, regular examinations of throat swabs are carried out for the presence of haemolytic streptococci. As this organism is frequently found in chronic catarrhal conditions, a number of vaccines have been prepared and issued for treatment purposes, in many cases with excellent results.

Malaria.—Malaria was diagnosed by the Laboratory on several occasions during the year.

Veterinary work.—Work done in conjunction with the Veterinary Officer includes, besides the examination of milks for tuberculosis, such investigations as are necessary for the efficient maintenance of the horses belonging to the Corporation. While no individual spectacular case occurred during 1936, there is a considerable amount of steady work done in this connection and consultations with the Veterinary Officer are frequent.

Some hides for suspected anthrax were examined during the year, but with negative results.

Birkenhead offers unrivalled opportunities for the scientific investigation of diseased meat. Many samples are examined under the microscope, and museum specimens are prepared from time to time.

Lectures.—At the Birkenhead Municipal Hospital, courses of lectures were given to the nursing staff on bacteriology, pathology, and bio-chemistry, in connection with the examinations for the State Certificate of the General Nursing Council.

Museum.—Interesting specimens are added to the pathological museum from time to time, which will be of great value for teaching purposes.

Comparison with previous years.—The work of the Laboratory has grown steadily during the past six years. Details are given below :—

Nature of specimens.	1931	1936
Sputa for B. Tuberculosis	1473	1758
Cultures for B. diphtheriæ	1994	3510
Diphtheria virulence tests	20	19
Blood tests (agglutination)	39	62
Smears for gonococci	511	967
General bacteriological examinations	742	3309
General biochemical examinations	257	1887
General pathological examinations	152	2032
Vaccines issued	29	60
Milk, graded, bacterial counts	161	219
Milk, samples for tubercle bacilli	421	325
Water, bacteriological examinations	97	117
Total	5896	14265

General remarks.—The immunisation schemes against diphtheria has resulted in some reduction of the cultures required during the past two years. This, while showing a diminished figure as far as actual numbers of investigations are concerned, has been very welcome from the point of view of running the Laboratory, as the complexity of the work in other directions has been still further augmented.

It may be said with accuracy that the absolute maximum has been reached that can be done with the present staff and in the present premises, without sacrificing the rapidity and accuracy that are essential to laboratory work of all kinds. One branch of the work can expand only at the expense of others, and the conditions under which responsible and vitally important investigations have to be performed throw a great strain on the staff.

There is every prospect, however, of a forward step being taken during 1937 with the preparation of plans for new central public health premises, and in these up-to-date laboratories will form an important part.

BIRKENHEAD MUNICIPAL HOSPITAL

ADMINISTRATIVE ARRANGEMENTS

Dr. R. A. Grant, F.R.C.S. (Edin.), Medical Superintendent, has been in charge of the Hospital throughout the year, and has prepared all the statistics relating to cases dealt with.

The services of the following Consultants on the staff of the Medical Officer of Health were retained during the year 1936.

Aurist and Laryngologist—Mr. P. W. Leathart.

Psychiatrist—Dr. S. Barton Hall.

Orthopaedic Surgeon—Mr. T. Hartley Martin.

Obstetric Surgeon and Gynaecologist—Mr. S. B. Herd.

Ophthalmic Surgeon—Dr. D. L. Charters.

Physician—Dr. W. Johnson.

Radiologist—Mr. R. W. Gemmell.

During the past year there was a further increase in the work done at the hospital in almost all departments. The total cases dealt with show an increase of 245 over the previous year.

Difficulty in accommodating patients in the hospital, especially during the winter months, has become more acute during the past year. In August, 1936, accommodation for some 40 senile cases was obtained in the Institution premises in the hope that less overcrowding would occur during the winter months in the hospital. In spite of the increased accommodation thus provided in the hospital by the liberation of 40 beds most of the wards have been working at high pressure and there is urgent need for a further increase in hospital beds for acute medical cases, both male and female, as well as for children. In order to satisfy the growing needs of the hospital at least 80-100 beds are required.

The Maternity Block has been particularly hard worked during the year, and it has become necessary at times to close down admissions to this block altogether. 406 women were dealt with in the Maternity Block this year as against 383 in 1935 and 171 in 1930. In spite of this large increase of patients in 1936 as against the number in 1930, no further addition to the available beds, namely 20, has been made and it is now obvious that the number of available beds is insufficient to cope with the increasing work called for.

At the present time only one operating theatre exists in the hospital and it is clear that this is insufficient for the growing requirements of the surgical work done. There is an urgent need for a modern up-to-date theatre unit complete with sterilising plant to be built in the hospital, which would enable surgical cases to be dealt with more rapidly.

It is often found at the present time that the theatre is in use when an acute surgical emergency is admitted, and this consequently has to wait until the theatre has been vacated before the case can be operated upon. The present theatre is really obsolete when viewed in comparison with similar blocks in modern up-to-date hospitals.

We are again indebted to the Merseyside Blood Transfusion Society for their excellent services. During the year 57 blood transfusions were performed.

The greatest co-operation has existed between the hospital and other sections of the Medical Officer of Health's Department.

TABLE B.M.H. 1
Admissions, births, discharges and deaths, 1936

	Men	Women	Children	Total
In Hospital at 31st December, 1935	200	136	116	452
<i>Admissions :</i>				
From own homes or other hospitals	1544	2050	907	4501
From Birkenhead Public Assistance Institution	48	28	10	86
From Scattered Homes	—	—	11	11
Births in Hospital	—	—	382	382
Total cases dealt with	1792	2214	1426	5432
<i>Discharges :</i>				
To own homes or other hospitals	1139	1729	1184	4052
To Birkenhead Public Assistance Institution ...	126	71	33	230
To Scattered Homes	—	—	8	8
Deaths in Hospital	371	269	100	740
Total discharges and deaths	1636	2069	1325	5030
Cases in hospital, 31st December, 1936	156	145	101	402

TABLE B.M.H. 2						
Surgical Operations carried out, 1936						
Major operations (excluding tonsils and adenoids)						923
Operations for tonsils and adenoids:—						
School medical service ... ..	...	...	...	...	30	
Other ... ..	...	...	...	...	21	
						51
Eye operations ... ..	...	...	...	...	...	14
Nasal operations ... ..	...	...	...	...	...	7
						995

TABLE B.M.H. 3
Maternity Cases dealt with, 1936

	Total No. of women dealt with	Married	Single	Total No. of children dealt with	Live Births	Still Births
Cases dealt with	406	373	33	411	382	29

There was one maternal death during the year.

TABLE B.M.H. 4
X-ray and ultra violet ray treatment, 1936

X-ray examinations made of:—

Stomach	...	...	...	...	295	
Kidney	...	...	...	...	148	
Chest	...	...	...	...	1364	
Gall bladder	...	...	...	...	85	
General	...	...	...	...	715	
					—	2607
						Attendance
						Treatments
Patients to whom X-ray treatment was given	...	...	...	...	4	54
X-ray films used	...	...	...	...	5497	—
Patients screened	...	...	...	...	916	—

TABLE B.M.H. 5
Ophthalmic examinations and treatment, 1936

Patients seen	...	...	...	...	350
Attendances made by patients	...	...	...	...	665
Spectacles prescribed	...	...	...	208	
Spectacles not prescribed	...	...	...	142	
				—	350
Operations performed	...	...	...	...	14

TABLE B.M.H. 6
Sunlight, massage, electrical and remedial exercises treatment, 1936

						Attendance
						Treatments
Patients to whom sunlight treatment was given	56	535				
Patients who received massage treatment	103	1456				
Patients who received massage and electrical treatment	...	...	...	...	44	1105
Patients who received electrical treatment only	75	829				
Patients tested for electrical reactions	...	12	12			
Patients treated by exercises	...	85	838			
	375	4775				

TABLE B.M.H. 7
Dental treatment, 1936

Patients examined	...	...	...	...	799
Patients treated: for extractions	...	...	356		
for scalings	...	...	5		
			—		361
Operations performed	...	...	...	...	17

TABLE B.M.H. 8
Specimens sent to Municipal Laboratory, 1936

Bacteriological specimens	3901
Biochemical specimens	1716
Pathological specimens	1594
	<hr/> 7211

TABLE B.M.H. 9
Examinations of nursing staff, 1936

Nature of examination	No. of Nurses who sat	No. of Nurses who passed	No. of Nurses who failed
State Register Examination of General Nursing Council	29	21	8
Hospital Final Examination	23	21	2

MENTAL DEFICIENCY

ADMINISTRATIVE ARRANGEMENTS

Cases of mental deficiency fall into two categories—

- (a) Those which can be dealt with under the Mental Deficiency Acts, 1913 to 1927; for these the Mental Deficiency Acts Committee is responsible.
- (b) Those which can be dealt with under the Education Act, 1921; for these the Education Committee is responsible.

CASES COMING WITHIN THE PROVISIONS OF THE MENTAL DEFICIENCY ACTS, 1913 to 1927

The definition of cases coming within the provisions of the above Acts was given in full in my report for 1930.

During the past year 18 new cases came under the care of the Mental Deficiency Acts Committee.

2 cases were sent to institutions by judicial orders.

7 cases were placed under supervision pending institutional vacancies arising; 11 cases were placed under home supervision; 1 case died during the year; and 2 cases were discharged from institutions.

64 first visits and 519 re-visits were paid to the homes of mental defectives by the Health Nurses.

At the end of 1936 there were under the care of the Mental Deficiency Acts Committee 546 cases, as set out in the following table:

In institutions (placed by the Mental Deficiency Acts Committee under judicial orders)—

	Males	Females	Total
Birkenhead Institution	3	0	3
Royal Albert Institution (Lancaster) ...	0	2	2
Cranage Hall Certified Institution	25	29	54
	28	31	59

In institutions (placed by the Birkenhead Public Assistance Committee, or by parents; not under judicial order)—

Birkenhead Institution, etc.	4	4	8
Royal Albert Institution (Lancaster) ...	6	1	7
	10	5	15

In Rampton State Institution (placed by Board of Control—cases which have become too violent for retention in ordinary institutions)

2	1	3
---	---	---

Under home supervision—	Males	Females	Total
(a) Cases discharged from institutions ...	2	1	3
(b) Cases which should be in institutions	30	14	44
(c) Under domiciliary treatment by Public Assistance Committee ...	11	13	24
(d) Others (including ex-Special School cases, 283 in number)	243	152	395
Under Guardianship	2	1	3
	288	181	469
Total	328	218	546

Cranage Hall Certified Institution.—Towards the end of the year, additional accommodation became available at this institution; the number of patients for whom beds could be provided being increased from 62 beds (all for high grade females over the age of 16 years) to 318 beds (96 males and 182 females over the age of 16 years, and 40 cot and chair cases for both sexes of all ages).

At the end of the year, the number of Birkenhead cases in the institution was 54 (25 males and 29 females).

Although the increased accommodation at Cranage Hall has proved useful, there is still a large number of cases on the register for whom accommodation is required. The Cranage institution has so far provided largely for the type of patient for whom there has never been difficulty in finding beds elsewhere. It is for the lower grade cases, and cases of a complicated type, that accommodation is so urgently required.

Cases in other institutions.—There are 15 cases in institutions for whom provision should be made by the local Mental Deficiency Authority. These 15 cases are defectives who have been placed at the instance of the Public Assistance Committee, parents, etc.

Occupation Centre.—An Occupation Centre was opened by the Mental Deficiency Acts Committee in 1935 for the reception of cases who are ineducable within the meaning of the Education Acts. A description on the activities of the Centre was given in my annual report for 1935. At the end of 1936 there were in attendance at the Centre 30 children (14 boys and 16 girls); the average attendance during the year was 23.

The staff of the Centre consists of a supervisor (Miss E. Holding), an assistant, a guide who brings the children to the Centre, and a resident caretaker and his wife. The caretaker's wife does the cooking for the children at the Centre.

Dr. S. Barton Hall, the Consultant Psychiatrist on the staff of the department, has attended periodically at the Centre during the year, and has examined the children in attendance, as well as other patients who were referred to him. 21 sessions were held during the year and 37 mentally defective persons (23 males and 14 females) were

examined. Of the 37 cases 12 (6 males and 6 females) were subjected to tests for their mental age. In addition 5 other cases (males) were examined with regard to their mental condition. These cases were not mentally defective persons.

CASES DEALT WITH UNDER THE EDUCATION ACT, 1921

The definition of cases coming within the provisions of the above Act was set out in my annual report for 1930.

CASES COMING WITHIN THE PROVISIONS OF THE BLIND PERSONS ACT, 1920

The following classes of persons are included in the category of mental defectives by the Ministry of Health for the purposes of the Blind Persons Act, 1920:—

Blind persons suffering from epilepsy, fits or nervous disability.

WELFARE OF THE BLIND

GENERAL FACTS REGARDING BLIND PERSONS IN BIRKENHEAD

Number and ages of blind persons.—The total number of blind persons in Birkenhead coming within the scope of the Blind Persons Act, 1920, on 31st December, 1936, was 295; of these 164 were males and 131 females.

Age.			M.		F.		Total.
0—1	...	...	—	...	—	...	—
1—5	...	...	—	...	1	...	1
5—16	...	...	4	...	2	...	6
16—21	...	...	3	...	1	...	4
21—40	...	...	24	...	13	...	37
40—50	...	...	23	...	14	...	37
50—65	...	...	37	...	33	...	70
65—70	...	...	27	...	16	...	43
70 and over	...	...	46	...	51	...	97
			164	...	131	...	295
		

The ascertained causes of blindness are as follows:

	M.	F.	Total.
Cataract only	45	37	82
Cataract and myopia ...	5	5	10
Cataract and glaucoma ...	1	1	2
Cataract and other defects	7	6	13
Glaucoma only	16	13	29
Myopia only	15	15	30
Corneal obstruction	18	18	36
Other causes	57	36	93
		164	131
	
	

Blind persons who are otherwise defective.—Forty-two of the blind persons on the register were handicapped in addition by other physical or mental defects:—

	M.	F.	Total.
Mentally defective	6	3	9
Deaf	8	4	12
Deaf and dumb	1	1	2
Otherwise physically defective	13	6	19
		28	14
	
	

Children under 16 years of age.—These numbered 7; 4 boys and 3 girls. 4 boys and 2 girls were attending schools for the blind; 1 girl was in a Sunshine Home for Blind Children.

Conditions as regards employment.—The following table shows the position of blind persons in the area over the age of 16 with reference to employment:—

	M.	F.	Total.
Employed	18	2	20
Trained but unemployed ...	1	3	4
Under training	9	3	12
Not trained, but probably trainable	6	4	10
Probably unemployable ...	126	116	242
	<hr/> 160	<hr/> 128	<hr/> 288

The occupations of the employed blind in the area were as follows:—

	M.	F.	Total.
Agents, collectors, etc.	2	—	2
Basket & cane workers, brush makers, mat makers	11	1	12
Tuners	2	—	2
Miscellaneous	3	1	4
	<hr/> 18	<hr/> 2	<hr/> 20

Home Teachers.—Miss Gourlay, who left to take up another appointment on 31st January, paid 86 visits to blind persons, including 7 for the purpose of teaching Braille, Moon or handicrafts.

Miss Jones paid 1,334 visits to blind persons, including 135 visits for the purpose of teaching Braille, Moon or handicrafts.

Miss J. Crossley, who was appointed in place of Miss Gourlay and who took up her duties on the 4th August, paid 604 visits to blind persons, including 73 visits for the purpose of teaching Braille, Moon or handicrafts.

Meetings of the occupation class were held on 42 occasions.

Five social evenings were arranged: these were held at the North and South Health Clinics respectively. Thanks are due to the various concert parties which gave their services.

In July Miss Jones took a party of 64 by charabanc to Rhyl; and in December, by kind invitation of the Manager, approximately 100 blind persons attended a matinee performance at the Scala Cinema.

Home visiting by Health Nurses.—The Health Nurses paid 18 first visits and 2 revisits to blind persons in the area.

Financial assistance to blind persons.—At the end of the year 222 blind persons (132 males and 90 females) were in receipt of financial assistance under the scheme of the Council for the Welfare of the Blind.

HOUSING AND ENVIRONMENTAL HYGIENE

ADMINISTRATIVE ARRANGEMENTS

The staff engaged on the work of housing and general inspection consisted, at the end of the year, of the Chief Inspector, one housing inspector, eight district inspectors, and one inspector's assistant.

The eight district inspectors and the assistant inspector are required to devote approximately half their time to the work of housing inspection.

GENERAL

Area of the Borough.—The area of the Borough (land and inland water) is 8,586 statute acres. This area is largely built over, or otherwise occupied, by domestic buildings, docks, factories, railway stations, and sidings, etc.

Number of dwelling houses in the Borough.—The approximate number of dwelling houses of all descriptions within the Borough, excluding institutions, on 31st December, 1936, was 32,537.

Number of other buildings in the Borough.—The approximate number of other buildings within the Borough, on 31st December, 1936, was 5,683.

New dwellings erected, 1921-1936.—The new dwellings erected in the Borough between the date of the 1921 census and the end of 1936 were as follows:—

(1) Between the date of the 1921 census and 31st December, 1935—			
(a) With State assistance under the Housing Acts, 1919-1925			
(i)	By the Local Authority	2875	
(ii)	By other bodies or persons	609	
(b)	Other	2238	
			5722
(2) During 1936—			
(a) With State assistance under the Housing Acts, 1919-1925			
(i)	By the Local Authority	149	
(ii)	By other bodies or persons	0	
(b)	Other	422	
			571
Total			6293

No houses were erected during the year which did not comply with the building byelaws.

ADMINISTRATIVE ACTION TAKEN IN CONNECTION WITH HOUSING AND ENVIRONMENTAL HYGIENE

(a) Housing: action taken under Housing and Public Health Acts

During the twelve months ending December 31st, 1936, the following work was carried out by the department under the provisions of the Housing and Public Health Acts, and Regulations:—

1. Inspection of dwelling-houses during the year:—

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	10249
(b) Number of inspections made for the purpose	75142
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	1377
(b) Number of inspections made for the purpose	15573
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	49
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	1005

2. Remedy of defects during the year without service of formal notices:—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	—
---	---

3. Action under statutory powers during the year:—

A.—Proceedings under Sections 17, 18 and 23 of the Housing Act, 1930:

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	1005
(2) Number of dwelling-houses which were rendered fit after service of formal notices:—	
(a) By owners	1029
(b) By local authority in default of owners	4

B.—Proceedings under Public Health Acts:

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	3515
(2) Number of dwelling-houses in which defects were remedied after service of formal notices:—	
(a) By owners	3411
(b) By local authority in default of owners	—

C.—Proceedings under Sections 19 and 21 of the Housing Act, 1930 :

(1) Number of dwelling-houses in respect of which Demolition Orders were made	12
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	11

D —Proceedings under Section 20 of the Housing Act, 1930:

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	—
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	—

4. Housing Act, 1935.—Overcrowding :—

(a)— (i) Number of dwellings overcrowded at the end of the year	1565
(ii) Number of families dwelling therein	1843
(iii) Number of persons dwelling therein	10758
(b)—Number of new cases of overcrowding reported during the year	216
(c)— (i) Number of cases of overcrowding relieved during the year	279
(ii) Number of persons concerned in such cases ...	1538
(d)—Particulars of any cases in which dwelling-houses have again become overcrowded after the local authority have taken steps for the abatement of overcrowding	—
(e)—Any other particulars with respect to overcrowding conditions upon which the Medical Officer of Health may consider it desirable to report	—

(b) Slum clearance schemes

On representation made by the Medical Officer of Health, one clearance order was made by the Council under Part 1 of the Housing Act, 1930, in respect of the houses recorded in the table below. This clearance order has been submitted to the Minister of Health for confirmation.

No. of area	Name of area	Description of houses in area	No. of houses	No. of inhabitants	
33	Queen's Buildings	Queen's Buildings "A" Block	4	17	
		"B"	28	113	
		"C"	40	157	
		"D"	48	209	
		"E"	44	202	
		"F"	44	208	
		"G"	32	162	
		"H"	20	88	
		"I"	24	94	
		"K"	40	146	
		Stanley Court	"A"	8	32
		"B"	8	38	
		Stanley Road	"D"	6	23
		"E"	6	27	
Stanley Road Nos. 2, 4, 5, 7.		4	14		
Stewart Street Nos. 1, 2, 3, 4.		4	21		
Totals			360	155	

The total number of houses which have been demolished in respect of the 32 clearance orders detailed in the last two years' reports is 448.

The total number of new houses and flats erected by the Corporation for rehousing under Slum Clearance Schemes (32 areas as above) was 659.

The total number of persons rehoused was 3,001.

The total number of persons who found their own rehousing accommodation was 312.

(c) General environmental conditions exclusive of housing

The following shows, in summarised form, the work carried out by the Inspection staff in connection with matters other than the condition of domestic dwellings :—

Number of smoke observations taken	809
Number of smoke nuisances from factory and other chimneys reported to the Health Committee	—
Number of schools specially examined by the sanitary inspectors	89
Number of cowsheds inspected	109
Number of inspections of dairies and milkshops	620
Number of inspections <i>re</i> offensive trades	192
Number of sewer ventilators inspected	57
Number of street gullies inspected	72
Number of caravans inspected	16
Number of caravans re-inspected	395
Number of back passages inspected	169
Number of investigations regarding the keeping of pigs, fowls, and other animals	27
Miscellaneous inspections (not included above)	1002

(d) Theatres, Music Halls, &c.

(Ministry of Health Circular No. 120, dated 25th August, 1920)

75 visits were made to theatres, music halls and other places of entertainment, with a view to ascertaining whether conditions as to ventilation, structure of dressing rooms, &c., were satisfactory.

(e) Rats and mice

The following is a summary of the work carried out by the district inspectors under the provisions of the Rats and Mice (Destruction) Act, 1919:—

No. of premises inspected	484
No. of visits and re-visits	717
No. of notices served on occupiers	244
No. of notices served on owners	197
No. of premises satisfactorily dealt with	235
No. of premises still under observation or where work is being carried out	9

(f) Inspection of lodging houses, &c.

During the year the inspector of common lodging houses, &c., paid regular visits to common lodging houses and houses let in lodgings.

Registered common lodging houses (8 in number):

Day inspections	90
Night inspections	48
Insanitary conditions reported and dealt with	23

Houses let in lodgings (333 in number):

Day inspections	1050
Night inspections	—
Insanitary conditions reported and dealt with	39

(g) Swimming baths and pools

There are three public swimming baths in the Borough.

Samples of water from these baths are taken at intervals, before and after bathing has taken place. These samples are examined bacteriologically at the Municipal Laboratory.

There are no privately owned swimming baths or pools open to the public in the area.

(h) Eradication of bed bugs

The Corporation Estates Repairs Supervisor reports that during the year 180 Council houses and 378 other houses were found to be infested. All these houses were disinfested.

The means employed by the Supervisor in freeing infested occupied houses from bugs is Hydrocyanic acid gas; the actual work being carried out by contract. This is used only for treating the belongings and furniture of the tenants; the goods being taken to the Corporation Yard where gas is applied. All furniture, bedding, etc., are thoroughly examined before being passed as free.

When houses are vacant, "Zaldecide" is used by the Supervisor's staff for freeing infested houses, and is stated to have proved most successful.

The disinfestation of occupied premises is carried out by contract.

FACTORIES, WORKSHOPS AND WORKPLACES

FACTORY AND WORKSHOP ACTS, 1901 AND 1907

The Factory and Workshop Act, 1901 (s. 132), requires the Medical Officer of Health in his annual report to the Council to report specifically on the administration of that Act in workshops and work-places. The following is a summary of the work carried out during the year.

1.—Inspection of factories, workshops and workplaces

Premises	No. of		
	Inspections	Written notices	Prosecutions
Factories (including Factory Laundries)	4	1	—
Workshops (including Workshop Laundries) ...	161	12	—
Workplaces (other than Outworkers' premises)...	4	—	—
Total.....	169	13	—

2.—Defects found in factories, workshops and workplaces

Particulars	No. of defects			Number of prosecutions
	Found	Remedied	Referred to H.M. Inspector	
<i>Nuisances under the Public Health Acts*—</i>				
Want of cleanliness	17	17	—	—
Want of ventilation	—	—	—	—
Overcrowding	—	—	—	—
Want of drainage of floors	—	—	—	—
Other nuisances.....	10	10	—	—
Sanitary accommodation—				
Insufficient	—	—	—	—
Unsuitable or defective	5	5	—	—
Not separate for sexes	—	—	—	—
<i>Offences under the Factory & Workshops' Acts—</i>				
Illegal occupation of underground bake- house (s. 101)... .	—	—	—	—
Other offences	2	2	—	—
(Excluding offences relating to outwork and offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921.)				
Total.....	34	34	—	—

*Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

Home work.—Lists were received from employers as follows:—

From employers sending twice in the year—4 lists (8 workmen).

From employers sending once in the year—3 lists (2 contractors, 6 workmen).

In each case the work handled was the making of wearing apparel.

Registered workshops.—The workshops on the register at the end of the year were:—

Bakehouses	48
Confectioners	42
Boot repairers	29
Cabinet making and upholstery	13
Dressmaking	13
Millinery	5
Tailoring	18
Laundries	16
Joinery and carpentry	5
Saddlery and harness making	6
Smiths	8
Wagon repairers	4
Motor and cycle repairers	8
Other workshops	24
	<hr/>
	239
	<hr/>

Other matters.

Workshops removed from the register	16
New workshops opened and placed on register	8
Underground bakehouses discontinued	—
Number of underground bakehouses on the register at the end of the year	20
Instances of failure to affix abstract dealt with	—

RAG FLOCK ACT, 1911

Pursuant to the provisions of the above Act, 13 visits were made.

At the time of these visits the rag flock being used or stored on the premises was to all appearance in a satisfactory condition; no samples were, therefore, taken for the purpose of analysis.

PHARMACY AND POISONS ACT, 1933

The names of 110 persons, entitled to sell poisons included in Part II of the poisons list, have been entered on the register of persons so entitled.

HEALTH EDUCATION

It was hoped that the proposed Cheshire Joint Committee for Health Education would come into being during the year; but though it was able to overcome a legal difficulty in regard to its constitution lack of interest on the part of local authorities who, it was anticipated, would be constituent members caused the project to be abandoned.

During the year lectures were given by members of the staff as follows :—

	Approx. Audience
Bidston Women's Guild	50
Mothers of children at The Dell School	75
Beechcroft Adult Women	36
National Union of Railway Women's Guild	60

Posters supplied by the Central Council for Health Education have been regularly exhibited on the Empire Marketing Board poster frames.

A third edition of the brochure descriptive of the Council's Health Services was published towards the end of the year, and copies circulated among the public in various ways.

MATERNITY AND CHILD WELFARE

ADMINISTRATIVE ARRANGEMENTS

Infant welfare and postnatal clinics are held at Hamilton Square, Mount Grove, the North Health Clinic in Park Road West, and the South Health Clinic in Bedford Avenue; and toddler clinics (begun this year) at the North and South Clinics. The Hamilton Square Clinic was opened in 1916; the Mount Grove Clinic in 1923; the North Health Clinic at the end of 1929; and the South Health Clinic in December, 1934.

Staff.—The executive staff engaged on Maternity and Child Welfare work at the end of the year consisted of Dr. Williams (Hamilton Square antenatal and North antenatal, postnatal and toddler clinics), Dr. Muir (Hamilton Square and Mount Grove postnatal clinics); Dr. Blackstock (South postnatal and toddler clinics); and Mr. Herd (South antenatal clinic).

Dr. Mary Deacon continued to act as Inspector of Midwives until her retirement on the 15th November; no appointment in her place was made before the end of the year. Miss M. M. Graham acted throughout the year as Assistant Inspector of Midwives.

In addition to the part-time services of the Chief Health Nurse and the whole-time services of the Assistant Inspector of Midwives, the equivalent of the whole time of nine nurses was available for maternity and child welfare work at the end of the year.

The services of the Consultant Obstetrician and Gynaecologist (Mr. Herd) are available for difficult cases sent by the Assistant Medical Officers from the various clinics, and by medical practitioners in the area.

INSPECTION AND SUPERVISION OF MIDWIVES

Work under this section is concerned with the administration of the Midwives and Maternity Homes Acts, 1902 to 1926; the visiting of the homes of midwives, inspecting their instruments, etc., advising them on the details of their work and on their duties as set out in the above Acts, and in the rules issued by the Central Midwives Board.

Number of midwives.—During the year 1936, 64 midwives (excluding those on the staff of the Birkenhead Municipal Hospital—25 in number) entered their names on the local register as practising in the Borough.

Of the 64 midwives, 62 were trained and 2 untrained.

Number of cases attended by midwives.—The cases attended by midwives alone (no doctor being in attendance) numbered 2,186; three-quarters of the total births in the Borough.

Visits of inspection.—The Assistant Inspector of Midwives paid 220 quarterly and 17 special visits of inspection. She also paid 67 visits to the homes of midwives, but was unable to obtain access.

Interviews in office.—25 interviews between midwives and the Assistant Inspector of Midwives took place during the year.

Cases of puerperal fever and puerperal pyrexia in practice of midwives.—6 visits were made to 5 cases of puerperal fever and puerperal pyrexia.

Cases requiring medical help.—527 cases were notified by midwives in which medical aid had been called in, as against 521 last year. 831 visits were made regarding cases requiring medical help.

Notifications received from midwives.—40 cases of stillbirths were notified; 21 cases were notified of infants receiving artificial feeding; 4 cases were notified in which a death had occurred in the practice of a midwife.

Supply of silver nitrate to midwives.—Supplies of a colloid preparation of silver nitrate are issued to midwives at cost price. No request was made for this during the year.

Ophthalmia neonatorum.—8 cases were notified during the year.

Notified	Treated at home	Treated in hospital	Vision unimpaired	Still under treatment at end of year	Deaths
8	6	2	7	1	—

Employment of, or subsidy to, practising midwives by the local authority.—No practising midwives (except those on the staff of the Municipal Hospital) are employed or subsidised by the Birkenhead Local Supervising Authority.

HOME VISITING OF EXPECTANT MOTHERS, MOTHERS, AND YOUNG CHILDREN

Home visiting.—The following is a summary of the visits paid by the health nurses in connection with expectant mothers, mothers, and young children:—

2100 routine first visits were paid to infants.

4589 routine revisits were paid to infants under 1 year.

10739 routine visits were paid to children over 1 year and under 5 years old.

36 first visits and 15 revisits were paid in connection with the investigation of stillbirths.

5 cases of ophthalmia neonatorum were visited and kept under supervision.

127 first visits were paid to expectant mothers.

97 revisits were paid to expectant mothers.

118 visits were made in connection with deaths of infants.

776 visits were made in connection with miscellaneous matters.

2667 visits were made in which no access could be obtained.

POSTNATAL CLINICS

At the end of the year the postnatal clinics were being held as follows:—

Hamilton Square clinic: Monday and Wednesday afternoons, 2 to 5 p.m.

South clinic: Tuesday and Thursday afternoons, 2 to 5 p.m.

Mount Grove clinic: Friday afternoon, 2 to 5 p.m.

North clinic: Wednesday and Thursday afternoons, 2 to 5 p.m.

The following table gives an indication of the work done at the clinics during the year:—

	Hamilton Sq. (100 sessions)		South (103 Sessions)		Mount Grove (51 sessions)		North (104 sessions)		Totals	
	1st visits	Re- visits	1st visits	Re- visits	1st visits	Re- visits	1st visits	Re- visits	1st visits	Re- visits
Attendances made by infants under 12 months	331	5454	387	6214	121	1922	359	6016	1201	19606
Attendances made by children aged 1—2 years	10	482	20	778	7	124	9	602	46	1986
Attendances made by children aged 2—5 years	13	117	26	299	21	54	13	395	73	865
							Total		1320	22457
Examinations of children by Doctor	325	2935	426	3196	139	965	360	3170	1250	10566

Voluntary workers.—I have again to express appreciation of the valuable services given at the various clinics by voluntary workers, who gave up a great deal of their time for this purpose.

Supply of Milk.—Dried milk was sold at the clinics to suitable cases.

During the year supplies of milk were given free under the Milk (Mothers and Children) Order, 1921, to

264 nursing mothers,
585 children and
535 expectant mothers.

Milk is given only to—

- Nursing mothers who are actually suckling their children;
- Expectant mothers in the last three months (usually) of pregnancy;
- Children up to nine months whose mothers are unable to nurse them;

and to these only when the doctors at the clinics have satisfied themselves, by medical examination of the cases on whose behalf the applications have been made, that the supply is essential on grounds of health.

TODDLER CLINICS

Clinics for toddlers were opened at the North and South Clinics in February: these were in charge respectively of Dr. Williams and Dr. Blackstock. The object of a toddler clinic is to provide facilities to parents to have children between the ages of babyhood and entry to school periodically overhauled so that so far as possible they may start their school life physically fit and able to profit by their education. The value of a special clinic for these children is the emphasis which is thus laid upon the need for regarding them as subjects requiring particular attention and care at an important stage in their lives.

The exigencies of accommodation at Hamilton Square and Mount Grove make it impossible to hold toddler clinics at these centres; but in default mothers are encouraged to bring their toddlers to the post-natal clinics, where, however, the limitations of time do not allow of the attention being given to them which is necessary.

Below are particulars of the work carried out at the toddler clinics during the year :—

	North (42 Sessions)		South (40 Sessions)		Totals	
	1st Visits	Re- Visits	1st Visits	Re- Visits	1st Visits	Re- Visits
Attendances made by children aged 1-2 years	18	121	17	424	35	565
Attendances made by children aged 2-5 years	56	287	48	400	104	687
			Total		139	1252

ANTENATAL CLINICS

Antenatal clinics were held throughout the year, twice weekly at Hamilton Square, and once weekly at the North Clinic. Clinics were held on 200 occasions; the number of patients dealt with being 1,020 and the total number of attendances made being 5,210. Of this total 135 patients carried over from 1935 made 682 attendances.

Condition with regard to pregnancy.—The condition with regard to pregnancy of the 895 new cases at the time of their first visit was as follows:—

- (a) 265 were in their first pregnancy.
- (b) 587 were in their second or subsequent pregnancy (159 of these patients had attended the clinic during a previous pregnancy; 82 during two previous pregnancies; 30 during three previous pregnancies; 17 during four previous pregnancies; 16 during five previous pregnancies; 9 during six previous pregnancies; 8 during seven previous pregnancies; and 3 during eight previous pregnancies).
- (c) 43 were not pregnant.

Abnormalities.—The abnormalities or diseases found to be present in the new cases who attended the clinics during 1936 were as follows:

(a) Women who came to the clinics in their first pregnancy

Abnormality or disease	No. of cases
Cardiac disease	5
Albuminuria	8
Venereal diseases.....	1
Glycosuria	1
Other defects	2

(b) Women who came to the clinics in their second or subsequent pregnancy

Abnormality or disease	No. of cases
Venereal diseases	1
Varicose veins	9
Albuminuria.....	16
Tuberculosis	2
Cardiac disease	7
Glycosuria ...	1
Hydramnios.....	2
Other defects ...	2

Progress of pregnancies.

(1) *New cases.*

(a) Of the 265 women who came in their first pregnancy 182 were delivered before the end of 1936, having 84 boys and 101 girls (including 1 set of twins and 6 still-born children).

2 had miscarriages.

9 left the district.

72 were not delivered before the end of the year.

(b) of the 587 women who had had previous pregnancies 418 were delivered before the end of the year, having 247 boys and 179 girls (including 8 sets of twins and 16 stillborn children).

4 had miscarriages.

1 had an abortion.

24 left the district.

140 were not delivered before the end of the year.

(2) *Cases carried forward from 1935 (135 patients).*

(a) Of the 39 women who came in their first pregnancy 36 were delivered during the year, having 22 boys and 14 girls (including 1 stillbirth).

3 left the district.

- (b) Of the 96 women who had had previous pregnancies 88 were delivered during the year, having 44 boys and 45 girls (including 1 set of twins and 4 stillbirths).

1 had a miscarriage.

7 left the district.

Attendances at clinics.—Below are set out the details of attendances at the clinics:—

HAMILTON SQUARE CLINIC
(101 Sessions)

	First pregnancy	Subsequent pregnancy	Non-pregnant	From 1935	Total
Cases	91	270	15	79	455
Attendances.....	438	1548	32	399	2417

NORTH CLINIC
(47 Sessions)

	First pregnancy	Subsequent pregnancy	Non-pregnant	From 1935	Total
Cases	100	184	9	42	335
Attendances.....	490	851	17	187	1545

SOUTH CLINIC
(52 Sessions)

	First pregnancy	Subsequent pregnancy	Non-pregnant	From 1935	Total
Cases	74	133	19	14	240
Attendances	414	705	33	96	1248

Maternity outfits.—2 outfits were lent out and returned during the year.

ARTIFICIAL SUNLIGHT TREATMENT

Artificial sunlight treatment was given to cases attending at the North and South Health Clinics. 82 sessions were held during the year. 42 cases attended for the first time, a total of 481 attendances being made; Dr. Williams and Dr. Blackstock were in charge of this work.

INFANT LIFE PROTECTION

At the end of the year the names of 73 children were entered on the register in accordance with the provisions of Section 65 of the Children and Young Persons Act, 1932, as having been taken by persons to keep for reward. 19 children were in St. Faith's Home, 18 in Christ Church Home, 4 in All Saints' Home, and 32 in charge of foster parents at private dwellings.

The Health Nurses paid 42 first visits and 400 revisits to these children.

OTHER PROVISION MADE BY THE LOCAL AUTHORITY

Cases dealt with at Maternity Hospital.—During the year 12 cases were admitted into the Maternity Hospital under the terms of the agreement; the number of bed days being 209.

Cases dealt with by the Birkenhead District Nursing Society.—During the year the Society's nurses paid 727 visits to 54 cases, under the agreement between the Society and the Corporation. In addition 1,198 visits were paid to 65 cases in children under 5 years of age not included in the agreement.

Cases of confinements attended by medical practitioners.—In 386 cases where doctors were called in to difficult cases of confinement the doctors' fees were paid by the Corporation under the provisions of the Midwives Act, 1918. Accounts for the full amount of the fees in 75 cases, and of part of the amount in 21 cases, were rendered to patients.

Temporarily necessitous cases attended by midwives.—In 265 cases where midwives attended temporarily necessitous cases of confinement the midwives' fees were paid by the Corporation under the provisions of the Maternity and Child Welfare Act, 1918. Recovery of fee was made in 3 cases.

AGENCIES ASSISTED BY THE LOCAL AUTHORITY

The Corporation gives financial support to certain institutions, etc., for general services rendered in connection with maternity and child welfare work.

Birkenhead and Wirral Invalid Children's Association.—Arrangements are made by this Association to send children to convalescent homes, and to provide massage treatment for cases of infantile paralysis, etc. During the year 1936, 37 children were sent to convalescent homes by the Association.

St. Faith's Home for Mothers and Babies.—Here accommodation is provided for unmarried mothers and their children—22 cots for babies and 14 beds for mothers. The number of cases admitted to the Home during the year was as follows:—

Expectant mothers	10
Babies	8

Birkenhead Maternity Hospital.—There are 29 beds provided at the hospital, including 3 isolation and 2 labour beds. The number of cases admitted during the year was 457.

4 beds are provided for delicate babies. 23 babies were admitted during the year.

At the maternity and child welfare clinic held in connection with the hospital the following attendances were made during the year:—

Antenatal clinic: 1st visits 521; revisits 2,466.

Postnatal clinic: children under 1 year—
1st visits 264; revisits 1,988.
children 1—5 years—
1st visits —; revisits 64.

St. Elizabeth's Convent.—At the maternity and child welfare clinic held here in connection with this Institution the following attendances were made during the year—

Antenatal clinic: 1st visits 48; revisits 50.

Postnatal clinic: children under 1 year—
1st visits 120; revisits 976.
children 1—5 years—
1st visits 9; revisits 668.

Financial assistance.—The grants made by the Corporation to the above voluntary associations providing maternity and child welfare services under section 101 of the Local Government Act 1929 are as follows:—

	£
Birkenhead and Wirral Invalid Children's Association	40
St. Faith's Home for Mothers and Babies	650
Birkenhead Maternity Hospital—	
(a) Hospital treatment of delicate babies	100
(b) Infant welfare centre	90
(c) District midwifery	22
St. Elizabeth's Convent	50

AGENCIES NOT PROVIDED OR ASSISTED BY THE LOCAL AUTHORITY

Other agencies whose work in Birkenhead touches the welfare of mothers and infants, but which are not provided or assisted by the Birkenhead Corporation, are the following:—

The Birkenhead and Wirral Children's Hospital.
The Charity Organisation Society.
The Society for the Prevention of Cruelty to Children.
The Gynæcological Clinic at the General Hospital.

MATERNITY MORTALITY

During 1936, 11 women, ordinarily resident in Birkenhead, died from causes associated with pregnancy and childbirth.

This gives a maternal mortality rate of 4.30 per 1,000 births (living and still), as compared with a rate of 3.65 for the whole country.

The causes of the deaths were as follows:—

Puerperal sepsis	5
Other puerperal conditions	6

Most of these deaths were investigated by the medical staff of the department, confidential reports being sent to the Ministry of Health.

MISCELLANEOUS**NURSING HOMES**

Under the Nursing Homes Registration Act 1927 any premises used " for the reception of and the providing of nursing for persons suffering from any sickness, injury or infirmity " (excluding Government and municipal hospitals and those established by Act of Parliament or Royal Charter) are required to be registered by the local authority, which has the power to exempt institutions not carried on for profit. The owners of non-registered homes are subject to penalty.

It is the duty of the local authority to inspect and generally to supervise registered nursing homes; and it can, if it thinks fit, cancel registration.

At the end of the year the number of nursing homes registered in the Borough was 14; no applications for registration were made. All these homes were inspected quarterly by an Assistant Medical Officer. They were generally maintained efficiently; suggestions as to minor improvements in various ways usually being adopted readily by the owners.

OCCUPATIONS

The staple industries of the district are shipbuilding, ship-repairing and engineering.

The Registrar-General's returns setting out the occupations of persons resident in the Borough at the time of the 1931 census became available in 1934, and were published in my annual report for that year.

HEALTH OF SCHOOL CHILDREN

Staff.—The Medical Staff engaged in carrying out School Medical Service duties at the end of the year consisted of Dr. Blackstock, Dr. Williams, Dr. Muir, Dr. Sandilands and Dr. Marsh; the last-named being engaged on part-time duty.

Dr. Mary A. S. Deacon, who was appointed Assistant School Medical Officer in 1919, retired from the service in November.

Mr. P. Wilson Smith, L.D.S., Dental Surgeon, and Miss E. M. Warlow, L.D.S., Mr. W. G. Walch, L.D.S., and Mr. A. C. Capper, L.D.S., Assistant Dental Surgeons, have been responsible for dental inspection and treatment throughout the year.

Co-ordination.—All the Assistant School Medical Officers (with the exception of Dr. Marsh) are also Assistant Medical Officers of Health, and co-ordination between the school medical services and the other health services provided by the Corporation is thus very close, so far as staff is concerned. The interest shown, and advice readily given, by the Director of Education in connection with all branches of the work are of great value.

School Hygiene.—The premises of all public elementary schools are inspected annually by the Assistant School Medical Officers. Attention is directed particularly to the condition of the sanitary conveniences, lavatories, cloakrooms and playgrounds; and to the adequacy of ventilation and lighting. The Director of Education is furnished with copies of these reports (and of those made by the Sanitary Inspectors) so that any necessary action may be taken.

School Camp.—The eighth school camp for children from the schools of Birkenhead was held during the period 22nd May to 5th June.

Six hundred children who had been selected as being suitable cases to attend were medically examined. After numerous re-examinations, and treatment for various minor ailments in a number of children by the Health Nurses, 576 children were eventually passed as medically fit, and attended the camp, 304 boys being sent to Derwen, near Ruthin, and 272 girls to Dyserth, near Prestatyn.

Two Health Nurses were in attendance at the girls' camp for the purpose of giving first-aid or carrying out any necessary treatment for minor ailments.

Open-air School.—No open-air school has yet been made available for Birkenhead children, although some steps have been taken towards selecting a site.

Nutrition.—Figures relating to the nutritional condition of children as ascertained at routine medical inspections are given in the statistical tables at the end of this report (table S2, B).

The Board of Education classification of nutrition (A. B. C. & D.) has been adopted for showing the results of the examinations carried out. In view, however, of the difficulty of reconciling the varying interpretations of this classification, the statistics obtained so far are not as useful as one might wish. During the coming year (1937)

further efforts will be made to establish uniformity (so far as this is possible) in the method of approach in examining children.

The provision of a satisfactory diet is all important. It should be noted that the word "satisfactory" is used, not "satisfying." A child may be supplied with ample quantities of food to assuage hunger, and still be grossly underfed so far as the essentials are concerned. The diet must be properly "balanced," that is, it must contain an adequate supply of *each* of the following:—

Proteins,
Fats,
Carbo-hydrates, and
Vitamins.

Many elementary school children exist almost entirely on carbohydrates and vegetable proteins. These supply their daily needs for expenditure of energy but they cannot provide for satisfactory growth. For this milk, butter, cheese, and fresh eggs or meat are essential. In drawing up a dietary for free meals to be provided for school children these facts have to be borne in mind. Such meals should aim at supplying what is left out of the home dietary; they should consist of meat, fish, eggs, milk and uncooked vegetables or fruit.

During the past year, in deference to the wishes of the Board of Education, the Committee agreed that selection of children for free meals should be on a medical basis, and accordingly appointed an additional Assistant Medical Officer so that the extra work involved might be undertaken without detriment to existing arrangements. Dr. Agnes A. Muir took up her duties on the 17th August.

The scheme adopted provides for the quarterly examination by one or other of the assistant medical officers of all children in attendance at school; with the exception of those already in receipt of free additional nourishment, who are inspected at monthly intervals. The rapidity with which these examinations have to be carried out precludes the possibility of keeping elaborate records. It should be observed that it is no part of the examining doctor's duty to enquire into a child's economic circumstances: he is to express his opinion as to the physical condition and indicate, where appropriate, the need for supplementary nourishment and the form in which it is required.

Physical Training.—Dr. T. Hartley Martin, the Committee's Orthopaedic Surgeon, has drawn attention to the increasing number of children suffering from minor foot, chest and spinal trouble caused by faulty posture and stance who are referred to his clinic. It is not possible for the massage staff to undertake treatment for all these cases, neither in any case is it desirable that the children should miss school for the length of time which attendance for remedial exercises would take up. Suitable instruction during the course of the lessons in physical training given as part of the school curriculum would in most cases be effective. The appointment of a highly-trained supervisor of physical training would be of great advantage. Such an officer could pay frequent visits to the various schools and prescribe in detail the types of exercises required for children referred by the inspecting medical staff.

Routine Examination of 4th Age Group.—As a result of the appointment of additional medical staff it was possible towards the end of the year to make a beginning with the routine examination of children during the term in which they are eligible to leave school. This examination provides a valuable opportunity for any defects to be remedied before the child enters the labour market and for his parent and the Juvenile Employment Officer to be informed of any particular type of occupation for which he may be physically unsuited.

General.—It is hoped that during the coming year, with the augmented medical staff, it will be possible to carry out medical examinations in more detail. An increase in the number of recorded defects is likely to occur; this should not be taken as an indication of a more physically-defective school population but rather as an indication of work being carried out more exhaustively. In the past, owing to the restricted medical staff available, more children than was desirable had to be dealt with at each session, with the result that there was some risk of missing defects in the incipient stages.

ELEMENTARY SCHOOLS

MEDICAL INSPECTION AND TREATMENT

(A) INSPECTION

Number of elementary schools and school children.—The number of elementary schools in the borough is:

Council Schools	21		
Voluntary Schools	21	Total	42

The recognised accommodation of these schools was :

Council Schools	16,763		
Voluntary Schools	10,983	Total	27,746

The average number of scholars on the rolls was :

Council Schools	12,711		
Voluntary Schools	8,557	Total	21,268

The average attendance was:

Council Schools	11,360		
Voluntary Schools	7,519	Total	18,879

Children inspected.—The following elementary school children were medically inspected during the year (excluding those inspected at Clinics):

1. At Routine Inspections in the ordinary schools	6727
2. At Special Inspections in the ordinary schools	92
3. At Routine Inspections in the Myope Class	23
4. At Routine Inspections at the Cloughton Road Council School	68
5. Candidates for School Camps	600
6. As prospective entrants to the Birkenhead Institute, the Girls' Secondary School, Park High School, Rock Ferry High School, Higher Tranmere High School for Girls, The Convent Secondary School, St. Francis Xavier's College and the Catholic Institute	355
7. Under the Employment of Children Bye-laws	73
8. Under the Children and Young Persons Act	28
Total	7966

Re-examination of defective children.—During the year 1,727 re-examinations of defective children were made in the schools by the Assistant Medical Officers.

Co-operation of parents, teachers and others.—Parents attended at the examination of 4,611 (68.5 per cent.) of the 6,727 children dealt with at routine inspections in ordinary schools.

Attendance of parents at these examinations still continues to be satisfactory:

Year	Percentage
1927.....	70.2
1928.....	71.2
1929.....	74.4
1930.....	76.4
1931.....	74.9
1932.....	73.2
1933.....	74.6
1934.....	74.6
1935.....	72.4
1936.....	68.6

A considerable number of children is referred to the various clinics for examination, and any necessary treatment, by teachers, school attendance officers and such voluntary agencies as hospitals and the Invalid Children's Association.

Vaccination.—In the ordinary inspections children were examined as to vaccination marks. Of the 6,727 children examined

2025 (30.1%)	showed no marks.
3165 (47.0%)	showed one mark.
432 (6.4%)	showed two marks.
127 (1.9%)	showed three marks.
978 (14.5%)	showed four or more marks.

The following figures show the percentage of children examined year by year during the last ten years who were found to have been vaccinated:

Year	Percentage
1927.....	78.6
1928.....	79.3
1929.....	77.9
1930.....	76.8
1931.....	76.1
1932.....	74.6
1933.....	73.1
1934.....	69.2
1935.....	69.6
1936.....	69.9

Height and weight.—Below is set out the average heights and weights (measured without footwear) of children comprising the groups examined during the course of routine inspections:

Group	Height						Weight					
	Boys			Girls			Boys			Girls		
	No.	Ft.	Ins.	No.	Ft.	Ins.	No.	St.	Lbs.	No.	St.	Lbs.
Entrants	1219	3	8.2	1175	3	7.9	1230	3	1.7	1186	3	0.6
2nd Age Group	813	4	0.7	736	4	3.3	823	4	2.9	750	4	1.4
3rd Age Group	1027	4	10.3	1001	4	11.0	1025	5	10.4	1006	5	12.7
4th Age Group	195	5	1.4	220	5	1.3	179	6	8.1	201	6	11.5

Infectious diseases.—Enquiry was made at each inspection as to the infectious diseases from which the children had suffered in the past. The information elicited is summarised in Table S 8.

Particulars of all cases of the important infectious diseases are supplied to the School Attendance Superintendent, so that regulations with regard to quarantine, etc., may be enforced.

In the event of several cases of diphtheria having occurred among children attending the same class, swabbing of the throats of the other children by the health nurses is carried out as a matter of routine, and biological virulence tests are made.

Defects found requiring medical or dental treatment.—Of the 6,819 children inspected at routine and special inspections in ordinary schools, 696 were found to have defects requiring medical or dental attention.

A full statement regarding the defects found, setting out the number of defective children, is given in Table S 2. In Table S 7 the defective children are classified according to the schools attended.

Particulars of the treatment provided for certain of these defects are given in the succeeding section.

(B) TREATMENT

The parents or guardians of all children found at routine examinations to be defective are informed immediately of the need for medical advice or treatment and are urged to consult their family doctors regarding the defects in question. They are later visited at their homes by the Health Nurses, the Assistant Medical Officers making periodical re-examinations in the schools to ascertain what action has been taken.

During the past year the Health Nurses paid 653 visits to the homes of defective children in connection with "following up"—517 first visits and 136 re-visits; and 1,727 re-examinations of defective children were made by the Assistant Medical Officers.

Treatment of children found, at medical inspections held during 1936, to be suffering from defects which required medical attention.—As has been stated above, 696 out of 6,819 children examined at routine and special inspections in ordinary schools during 1936 were found to be suffering from defects requiring medical or dental attention. 384 children received treatment before the end of the year for defects found during this and the preceding year.

Details of the various types of ailment treated will be found in Table S 4.

Treatment at the Eye Clinic.—Children who were suspected by the Assistant Medical Officers to require spectacles, and whose parents were not in a position to secure the necessary attention privately, were seen at the Eye Clinic by Dr. Williams.

The large number of *re-examinations* carried out during the year is worthy of note. A certain proportion of these cases attended on the instructions of Dr. Williams given at the Eye Clinic or of the Assistant Medical Officers at routine inspections in schools; but a large number was brought by parents of their own initiative for the purpose of having glasses repaired, or because they appreciated the importance in certain types of visual defect of periodical re-examination.

Care is taken to secure that, so far as can be judged without any elaborate system of investigation, only those parents who are not in a position to obtain private attention to their children's eyes are allowed to avail themselves of the facilities provided at the clinic.

During the year 430 new cases were examined. Spectacles were prescribed for 271 of these, the remainder being found to be emmetropic or cases for whom spectacles were of no benefit. 559 children attended for re-examination, and 498 pairs of spectacles (new or replaced) were supplied. The total cost of all the spectacles which were ordered during the year (including those ordered for secondary school children) was £111 16s. 9d., of which the parents were required to pay £95 13s. 11d. The total sum collected during the year (including arrears from previous years) was £94 13s. 9d.

The services of Dr. D. L. Charters, the consultant ophthalmic surgeon on the staff of the Medical Officer's Department, have been available in connection with cases of especial difficulty; 5 such cases were referred to him.

The following is a summary of the visual defects of new cases for whom spectacles were prescribed during the year :

First Eye	Second Eye	
Hypermetropia	Hypermetropia	96
Hypermetropia	Hypermetropic astigmatism ...	8
Hypermetropia	Normal	2
Hypermetropic astigmatism	Hypermetropic astigmatism ...	71
Hypermetropic astigmatism	Mixed astigmatism	5
Hypermetropic astigmatism	Normal	4
Myopia	Myopia	50
Myopia	Normal	10
Myopia	Myopic astigmatism	4
Myopia	Hypermetropic astigmatism ...	2
Myopic astigmatism	Myopic astigmatism	10
Mixed astigmatism	Mixed astigmatism	3
Mixed astigmatism	Hypermetropia	1
Mixed astigmatism	Normal	2
Myopic astigmatism	Normal	3
		<hr/> 271 <hr/>

The following conditions were also recorded among the new cases who attended the clinic :

Corneal nebulae	6
Nystagmus	2
Coloboma	2
Amblyopia	14

The new cases of strabismus noted during the year were as follows :

Convergent: Right eye 31; left eye 49; alternating 13.
Divergent: Right eye 1; left eye 1.

Treatment at the General School Clinic.—Details of the work of this clinic, where cases of external eye disease, skin disease, cuts and bruises, etc., are treated, will be found in Table S 4.

The number of children who received treatment at the clinic was 2,341; the total attendances numbered 11,354.

Treatment of heart disease and rheumatism.—No arrangements are made by the Local Education Authority for the treatment of children suffering from heart disease and rheumatism. A total of 18 children, whose heart condition was too severe to permit of their attendance at an ordinary elementary school, attended the special educational classes organised by the Invalid Children's Association. The classes were held on two occasions weekly at the North Health Clinic and performed a very useful service in providing interest and some instruction to these severely handicapped children. The children are examined periodically by Dr. A. Dingwall Fordyce, and kept under the general supervision of the Assistant Medical Officer who is in charge of the minor ailments clinic.

Treatment of orthopædic defects.—

1. *Examinations carried out at the clinic by the orthopædic surgeon.*—At the Clinic the orthopædic surgeon attended on 25 occasions during the year. The after-care sister made 79 attendances.

The clinic deals with all forms of crippling disease in children. The cost of the clinic is distributed as follows :

- (a) Tuberculous cases (all ages): Health Committee.
- (b) Non-tuberculous cases under school age: Maternity and Child Welfare Committee.
- (c) Non-tuberculous cases of and immediately over school age: Education Committee.

During 1936, 182 new cases were dealt with, as compared with 119 in the previous year:

Tuberculous cases	8
Non-tuberculous cases—	
Under school age	72
Of school age	102
Over school age	—
	<hr/>
	182
	<hr/>

There were 761 re-examinations made, as compared with 803 in 1935:—

Tuberculous cases	58
Non-tuberculous cases—	
Under school age	264
Of school age	409
Over school age	30
	<hr/>
	761
	<hr/>

The average number of cases seen by the surgeon per session was 33.7.

In the following table Dr. Hartley Martin sets out a classification of cases dealt with, and shows the results of treatment:

Diagnosis	Remaining at end of 1935	1936 New cases			Remaining at end of 1936			Discharges 1936					
		School age			School age			Cured	Relieved	Left district	Refused treatment	Unsuitable	Died
		Under	Of	Over	Under	Of	Over						
Infantile Paralysis	31	3	3	...	3	24	2	...	5	...	2	...	...
Spastic Paralysis	18	2	3	...	3	15	2	...	2	...	...	1	...
Rickets	78	19	2	..	42	29	...	21	1	...	3	...	...
Osteitis and Arthritis :													
(a) Tuberculous	34	2	6	...	3	27	5	...	4	...	2	...	..
(b) Non-Tuberculous ..	4	..	1	...	...	3	...	1	...	...	..	...	1
Congenital Deform.	24	5	9	...	11	22	1	2	...	...	1	...	1
Acquired Deform.....	80	24	45	...	36	72	...	24	4	...	6	1	...
No Apparent Defects..	15	19	39	...	14	6	...	...	...	...	2	51	...
Totals... ..	284	74	108	...	112	198	10	48	16	...	16	53	2

2. *Massage and remedial exercises.*—Massage and remedial exercises as prescribed by Dr. Martin were provided by the Invalid Children's Association. (There are two whole-time masseuses on the Association's staff.)

Attendances for massage and remedial exercises were made by clinic cases as follows:

Tuberculous cases	62
Non-tuberculous cases—	
Under school age	550
Of school age	3036
Over school age	—
	3648

In addition to the above, 2,042 attendances were made by non-clinic cases (that is to say, cases sent to the Association by orthopaedic surgeons attached to voluntary hospitals, etc.).

3. *Surgical apparatus—splints, etc.*—These are provided by the Association, the number of cases dealt with during the past year being as follows:

Clinic cases	172
Non-clinic cases	126

4. *Milk, tonics, convalescence, after-care.*—Most useful work is also done by the Association in providing milk, tonics, etc. for patients for whom these have been prescribed by the orthopædic surgeon and other doctors, and in following up and helping patients who have passed through the stage of active treatment:

	Clinic cases.	Non-clinic cases.
Children supplied with milk	175	431
Children supplied with tonics	158	141
Children sent to convalescent homes and country hospitals	88	84

5. *Hospital Treatment.*—Of the 466 cases that have been on the register of the orthopædic clinic and regarded as suitable for treatment during the past year, 29 (or 6.4%) required hospital treatment and were admitted to the Birkenhead Municipal Hospital and the Children's Hospital, Leasowe. These cases comprise :

	Stay in Hospital	
	Cases	Days
Rickets	18	1974
Congenital deformities	6	459
Infanile paralysis	3	251
Spastic paralysis	2	272

The total number of days in hospital was 2,965 (8 beds occupied throughout the year).

6. *Thingwall Sanatorium.*—At this institution children suffering from orthopædic defects of tuberculous origin are treated. Many are cases who have passed through a course of treatment at Leasowe Hospital, or are awaiting admission to that institution.

Treatment by ultra-violet rays.—Treatment of conditions such as debility, skin affections and certain forms of tuberculosis is provided both at the North and South Health Clinics and by the Invalid Children's Association in their premises in Hamilton Square. In all cases the carbon-arc is the type of lamp in use.

At the North Health Clinic a total of 21 children of school age made 64 attendances during the year:

	Improved	Not Improved	Still under treatment at end of year
Debility	6	1	3
Tuberculosis	3	2	1
Other conditions	7	2	4
Total	16	5	8

At the South Health Clinic a total of 5 children of school age made 64 attendances during the year:

	Improved	Not Improved	Still under treatment at end of year
Chorea ..	1	—	—
Tuberculosis	1	—	—
Rickets	2	—	—
Bronchitis	1	—	1
Total	5	—	1

At the Invalid Children's Association premises, 16 children of school age made 224 attendances during the year:

	Improved	Not Improved	Still under treatment at end of year
Rickets	5	1	2
Debility	8	1	3
Tuberculosis	1	—	—
Total	14	2	5

In addition, 736 attendances were made by children below and above school age.

Treatment of ear, nose and throat defects.—Since February, 1935, the services of Mr. P. W. Leathart, M.B., M.R.C.S., the Consultant Aurist and Laryngologist on the staff of the Medical Officer's Department, have been available for the diagnosis and treatment of defects of the ear, nose and throat occurring in children referred to him from the Minor Ailments Clinics.

Mr. Leathart emphasises that in the majority of cases enlarged tonsils and adenoids respond favourably to medical treatment; it is comparatively rarely that removal by operation is necessary.

The clinic is held on Monday afternoons at the Birkenhead Municipal Hospital. No charge is made for examination. Drugs are supplied at cost price, and a charge of 10s. 6d. (which may be reduced or remitted at the discretion of the Committee) is made for operative treatment of enlarged tonsils and adenoids.

A total of 228 children was examined by Mr. Leathart. 213 of these received treatment, which was satisfactorily completed in the case of 42.

Of this number 26 received operative treatment for enlarged tonsils and adenoids, and 4 for enlarged tonsils only.

Treatment of uncleanness.—The average number of visits paid during 1936 by the Health Nurses to each school in the Borough was 12.6; the total examinations numbering 68,953.

The number of individual children found by the Health Nurses to require attention was 2,509, as compared with 2,886 in 1935. In every case the parents were informed. In 10 cases of persistent neglect (8 of these cases were compulsorily cleansed), notices were served on the parents. The Nurses paid 85 visits to the homes of children (58 first visits, 27 re-visits).

A large proportion of the children reported as "requiring attention" was cases where only a few nits were present. The standard of cleanliness has improved greatly in recent years.

DENTAL INSPECTION AND TREATMENT

(A) INSPECTION

Scope of past year's work.—The work of dental inspection and treatment was concerned with the inspection and treatment of children born in the years 1923 to 1931.

Number Inspected.—12,399 children were dentally inspected during the year as follows:

Aged five years	807
Aged six years	1580
Aged seven years	1695
Aged eight years	1669
Aged nine years	1605
Aged ten years	1772
Aged eleven years	1339
Aged twelve years	1196
Aged thirteen years	736
	<hr/>
	12399

Number requiring dental treatment.—Of the 12,399 children inspected, 9,205 (74%) were selected as requiring treatment, the parents being advised to obtain this treatment privately, or, if unable to do this, at the Dental Clinic.

Cleanliness of teeth.—The children examined were classified according to cleanliness of teeth as follows:

Clean	6674
Fairly clean	4674
Dirty	1051
	<hr/>
	12,399

Condition of gums.—The following figures show the condition of the gums of the children examined:

Gums healthy	10369
Gums inflamed	1306
Gums septic	724
	<hr/>
	12399

Condition of bite.—This was found to be as set out below:

Bite good	8312
Bite fair	3442
Bite bad	645
	<hr/>
	12399

(B) TREATMENT

Notices were sent to the parents of the 9,205 children found to require dental treatment, with the following results:

Refused to have treatment done or did not reply ...	745	(8.1%)
Stated that treatment would be obtained privately...	1512	(16.4%)
Requested treatment at the Dental Clinic	6948	(75.5%)
	<hr/>	
	9205	

Treatment at the Dental Clinic.—Of the 6,948 children for whom treatment at the clinic was requested:

5301 were treated before the end of the year
922 did not attend when sent for
725 were awaiting treatment at the end of the year

6948

Besides the above 5,301 children treated at the clinic following on inspections held in 1936, the following also received treatment: 800 who had been inspected in 1935 and had not been treated before the end of that year, 3,302 who were brought by parents on their own initiative, 5 children in Thingwall Sanatorium, and 4 children outside age-groups attending Cloughton Road Council School. The total number of children treated at the clinic during 1936 was therefore:

Following on 1935 inspections	800
Following on 1936 inspections	5301
Brought by parents on their own initiative	3302
Children in residence at Thingwall Sanatorium	5
Children attending Cloughton Road School	4
	<hr/>
	9412

Details of treatment carried out.—This was as follows:

Temporary teeth filled	103
Temporary teeth extracted	12033
Permanent teeth filled	5698
Permanent teeth extracted	3582
Total fillings	5801
Total extractions	15615
Anæsthetic—general	1388
local	6818
Dressings	1080
Scalings	1977

The total number of attendances at the clinic numbered 12,071 and the number of treatments completed during the year was 8,775. 2,626 parents paid 1s. each and 243 parents 6d. each for treatment, the total amount paid being £127 7s. 6d. 6,717 children were treated free of charge.

SECONDARY SCHOOLS AND CONTINUATION SCHOOLS

MEDICAL INSPECTION AND TREATMENT

The powers and duties of local education authorities with regard to medical inspection and treatment in secondary schools and continuation schools are set out in Section 80 of the Education Act, 1921.

Schools at which medical inspection is carried out.—Medical inspection is arranged for at the following schools:

(a) Provided by the Local Education Authority—	No. on Roll
The Birkenhead Institute (Boys)	418
The Girls' Secondary School	477
Rock Ferry High School (Boys)	363
Park High School (Boys)	353
(b) Not provided by the Local Education Authority—	
The Higher Tranmere High School for Girls	241
The Convent Secondary School	270

There are no continuation schools provided by the local education authority.

(A) INSPECTION

Scope of medical inspection.—The existing arrangements provide for the examination once in each year of every child in the schools inspected; and for the re-examination of children found to be defective.

The opinion of the Board of Education in this connection is expressed in Circular 1153: "In view of the many defects that may arise during the critical period of adolescence, the Board attach great importance to arrangements being made for all pupils to come annually, as a matter of routine, under medical supervision."

The following schools were inspected, the totals and numbers found defective being shown:

	No. Inspected.	No. found defective
Birkenhead Institute	306	50
Girls' Secondary School	438	18
Rock Ferry High School	355	54
Park High School	348	90
Higher Tranmere High School for Girls ...	120	8
Convent F.C.J.	209	21
	<hr/> 1776	<hr/> 241

* Including those with defective teeth

Details of the various types of defects found are shown in Table S 10 (which includes children examined as entrants).

In addition 298 re-examinations were carried out.

(B) TREATMENT

Treatment of certain defects is provided, as in the case of children attending public elementary schools, for the children of those parents who are not in a position to obtain it privately.

Below are set out particulars relating to treatment provided for secondary school children during the year.

Treatment at the General School Clinic.—2 children made 4 attendances for treatment during the year. The defects were: one defective hearing, one minor injury.

Treatment at the Eye Clinic.—51 children were submitted to refraction at the Eye Clinic. Of these, 50 (of whom 32 attended for renewal or alteration of glasses previously obtained through the clinic) were found to have visual defects, spectacles being prescribed for all of them. 47 children received spectacles during the year.

The following is a summary of the visual defects of *new* cases for whom spectacles were prescribed:

First Eye	Second Eye	
Hypermetropia	Hypermetropia	1
Hypermetropia	Normal	1
Myopia	Myopia	9
Myopia	Normal	4
Hypermetropic astigmatism	Hypermetropic astigmatism ...	2
Amblyopia	Normal	1

18

The high incidence of myopia is to be noted.

(C) DENTAL TREATMENT

Dental inspection is not carried out in secondary schools; but dental treatment is provided for those children who have been inspected and treated while in attendance at elementary schools.

174 such children received dental treatment during the year, making 344 attendances at the clinic.

BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN

Children defective within the meaning of Part V of the Education Act are ascertained as a result of routine and special inspections in schools and reference for examination by School Attendance Officers, Health Nurses, voluntary bodies, etc. Such children are certified on the appropriate forms prescribed by the Board of Education and notification sent to the Director of Education.

Blind children.—(1) *Totally blind children.*—At the end of 1936 there were 6 totally blind children of school age on the register. (There were no additions or removals during the year.) All these children were in attendance at certified schools for the blind.

(2) *Partially sighted children.*—At the beginning of 1936 there were 43 partially sighted children of school age on the register. During the year the names of 10 children were taken off (8 on account of reaching the age of 16 years and 2 on account of leaving Birkenhead) and 4 new cases were added. Of these children 1 boy and 2 girls were attending ordinary schools, and 6 boys and 3 girls were not in attendance at any school (5 boys and 3 girls on leave of absence from the myope class, 1 boy feeble-minded). 12 boys and 13 girls were in attendance at the Myope Class held at Hemingford Street Council School. Below is a classification of the defects from which these partially sighted children suffer:

Myopia	7
Myopic astigmatism	16
Corneal nebulae	2
Nystagmus	1
Hypermetropic astigmatism and nystagmus	2
Hypermetropia and nystagmus	2
Congenital cataract	1
Congenital cataract and nystagmus	1
Coloboma iris and choroid	2
Optic atrophy	3
	<hr/>
	37

Of the 19 children in the myopic group who were on the register in 1935, and who were re-examined during 1936, the visual condition of 7 had grown worse.

Deaf children.—(1) *Totally deaf children.*—There is little difficulty in providing institutional treatment for totally deaf children, all the existing cases being accommodated at one or other of the two Schools for the Deaf in Liverpool.

(2) *Partially deaf children.*—No provision is made for the special education of partially deaf children.

Physically defective children.—The Local Education Authority has no special school for dealing with children who by reason of physical

defect are incapable of receiving proper benefit from the instruction in an ordinary public elementary school.

Mentally defective children.—All children over the age of seven attending public elementary schools have their intelligence quotients made out by the teachers. Where a quotient is 75 per cent. or below, the child's name is submitted to the Director of Education so that arrangements may be made for the child's examination by an Assistant Medical Officer; the same procedure being followed when, during the course of a routine or special physical examination, a child is suspected by an Assistant Medical Officer to be mentally defective.

The mental examination is held in the child's school (unless the child is not in attendance at any school) in the presence of the parent and the Committee's Inspector of Schools.

All children mentally defective within the meaning of the Education Act are in attendance at special schools.

Claughton Road Council School.—In accordance with the arrangements for ascertainment outlined above, 41 examinations of children suspected to be mentally defective were held at various schools and clinics during the year by the Assistant Medical Officers.

The results of these examinations are set out below:

Total number examined—Boys	40	
Girls	25	
	—	65
Number certified as mentally defective—Boys	14	
Girls	13	
	—	27*

*Four of these were notified to the Local Authority under the Mental Deficiency Acts.

Number recommended to continue in attendance at ordinary elementary schools—Boys	25	
Girls	12	
	—	37
Number certified for Thingwall Sanatorium		1

17 children left the school during the year

(a) on reaching the age of 16 years—	10*
(b) before reaching the age of 16 years—	
Notified to the Local Authority under the Mental Deficiency Acts	1
Transferred to Royal Albert Institution	1
Transferred to private school	1
Left Birkenhead	2
Left to take up employment	2

*Four notified to the Local Authority under the Mental Deficiency Acts.

A routine physical inspection of scholars attending the school was carried out. 68 children were examined, of whom 39 were found to have defects requiring medical or dental advice, the defects found being as follows:

Malnutrition	7
Defective vision	5
Other eye defects	7
Enlarged tonsils and adenoids	7
Other nose and throat defects	20
Enlarged cervical glands	9
Other defects	5

School dinners have been provided throughout the year at a cost to the parents of 2d. per day: since August these have been served from the Central Canteen Kitchen.

Milk is supplied to about half of the children each morning at $\frac{1}{2}$ d. per bottle.

The school continues to have the use of the recreation ground in Slatery Road during school hours and the facilities thus afforded for school activities in the open air are greatly appreciated.

HEALTH EDUCATION

During the year several talks have been given by Health Nurses to senior girls on hygiene, mothercraft, etc.

NURSERY SCHOOLS

No Nursery Schools are provided by the Local Education Authority.

MISCELLANEOUS

Examination of entrants to the Girls' Secondary School, the Birkenhead Institute, Park High School, Rock Ferry High School, Higher Tranmere High School for Girls, The Convent Secondary School, St. Francis Xavier's College and the Catholic Institute.—

During the year 355 elementary school children were examined with a view to their admission to the above schools. 47 were found to require treatment for 55 defects, the latter being as follows:

Defective teeth	23
Defective vision	17
Nose and throat defect	3
Heart Disease—Functional	2
Deformities—Spinal Curvature	1
Other Forms	6
Other defects	3

Classes for stammering children.—In addition to the quarterly visits paid to these classes by the Assistant Medical Officers, two examinations were made, covering a total of 59 children, with a view to admission to or withdrawal from these classes.

Children and Young Persons Act, 1933.—28 children summoned to appear before Police Courts were examined in accordance with the provisions of this Act.

Employment of Children Byelaws.—73 children were medically examined as to fitness for work under these byelaws. In 3 cases certificates were not granted.

Provision of meals.—By Section 84 of the Education Act, 1921, local education authorities are empowered to provide meals to any child attending an elementary school who is unable by reason of lack of food to take full advantage of the education provided. Particulars of such children are furnished to the Director of Education by the medical and nursing staff, head teachers and school attendance officers, and after medical examination the financial circumstances of the families concerned are closely investigated before meals are provided.

An average number of 695 children received meals each day, the total number of meals provided during the year being 177,212. Meals were supplied five days per week, with the exception of Bank and Public Holidays.

ELEMENTARY SCHOOLS

TABLE S 1

Medical Inspections of Children attending Public Elementary Schools
(see note a)

A.—ROUTINE MEDICAL INSPECTIONS.

Number of Inspections in the Prescribed Groups (see note b)—

Entrants	2516
Second age group	1616
Third age group	2099
Total	6231

Number of other Routine Inspections (see note c)	587
Grand total	6818

B.—OTHER INSPECTIONS

Number of Special Inspections (see note d)	3872
Number of Re-inspections (see note e)	4479
Total	8351

C.—CHILDREN FOUND TO REQUIRE TREATMENT

Number of individual children found at Routine Medical Inspection to Require Treatment (excluding Defects of Nutrition, Uncleanliness and Dental Diseases).

Note.—No individual child is counted more than once in any column of this Table; for example, a child suffering from defective vision and from adenoids appears once in Column 2, once in Column 3 and once only in Column 4. Similarly a child suffering from two defects other than defective vision appears once only in Column 3 and once in Column 4.

Group. (1)	For defective vision (excluding squint). (2)	For all other conditions recorded in Table S 2, A. (3)	Total. (4)
Entrants.....	7	188	195
Second Age Group.....	67	35	102
Third Age Group	98	33	131
Total (Prescribed Groups)	172	256	428
Other Routine Inspections	42	89	131
Grand Total.....	214	345	559

NOTES ON TABLE S 1

(a) The return refers to a complete calendar year.

(b) This heading relates solely to the routine medical inspection of the three ordinary age groups, *i.e.*, to medical inspection carried out

(i) in compliance with Article 17 of the Consolidated Regulations relating to Special Services—Grant Regulations No. 19;

(ii) on the school premises (or at a place specially sanctioned by the Board);

(iii) for the purpose of making a report on each child on the lines of the approved Schedule set out in Circular 582.

(c) Under this heading is recorded *routine* inspections, if any, of children who do not fall under the three prescribed age-groups, *e.g.*, *routine* inspections of a fourth age-group or of other groups of children, as distinct from those who are individually selected on account of some suspected ill-health for "Special" Inspection.

(d) A Special Inspection is a medical inspection by the School Medical Officer himself or by one of the Medical Officers on his staff of a child specially selected or referred for such inspection, *i.e.*, not inspected at a routine medical inspection as defined above. Such children may be selected by the Medical Officer during a visit to the School or may be referred to him by the Teachers, School Nurses, Attendance Officers, Parents, or otherwise. It is immaterial for the purpose of this heading whether the children are inspected at the School or at the Inspection Clinic or elsewhere. If a child happens to come before the School Medical Officer for special inspection during a year in which it falls into one of the routine groups, its routine inspection is entered in Part A of Table 1 and its special inspection in Part B. The inspection recorded under the heading of special inspections is only the first inspection of the child so referred for a particular defect. If a child who has been specially inspected for one defect is subsequently specially inspected for another defect, such subsequent inspection is recorded as a Special Inspection and not as a Re-inspection.

(e) Under this heading is entered the medical inspections of children who as the result of a routine or special inspection come up later on for subsequent re-inspection, whether at the School or at the Inspection Clinic. The first inspection in every case is entered as a routine or special inspection as the case may be. Every subsequent inspection of the same defect is entered as a re-inspection.

Nothing is included under the head of special inspections or re-inspections except such inspections as are defined above. Attendances for treatment by a Nurse, or for examinations by anyone other than a Doctor on the staff of the School Medical Service, are not recorded as medical inspections. If, however, at any such attendance a child is also examined by one of the Authority's Medical Officers, this is recorded as a special inspection or re-inspection as the case may be, even if treatment is also given; but such attendance is also of course recorded as an attendance for treatment.

TABLE S 2

A.—Return of Defects found by Medical Inspection during the year ended 31st December, 1936.

Defect or disease	Routine Inspections		Special Inspections	
	No. of defects		No. of defects	
	Requiring treatment	Requiring to be kept under observation, but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment
	(2)	(3)	(4)	(5)
<i>Skin</i>				
(1) Ringworm—Scalp	—	—	1	—
(2) „ —Body	—	—	16	—
(3) Scabies	1	1	53	—
(4) Impetigo	5	—	314	—
(5) Other diseases (non-tuberculous)	4	2	131	—
<i>Eye</i>				
(6) Blepharitis	13	6	54	—
(7) Conjunctivitis	2	1	111	—
(8) Keratitis	—	—	—	—
(9) Corneal opacities	—	—	—	—
(10) Other conditions (excluding defective vision and squint)	1	1	81	—
(11) Defective vision (excluding squint)	219	86	56	1
(12) Squint	53	10	28	1
<i>Ear</i>				
(13) Defective hearing	4	2	15	—
(14) Otitis media	16	6	149	—
(15) Other ear diseases	1	1	63	—
<i>Nose and throat.</i>				
(16) Chronic tonsillitis only	66	88	205	—
(17) Adenoids only	7	11	11	1
(18) Chronic tonsillitis and adenoids	9	22	27	—
(19) Other conditions	31	15	204	—
(20) Enlarged cervical glands (non-tuberculous)	18	37	31	—
(21) Defective speech	2	6	4	—
<i>Heart and circulation</i>				
(22) Heart disease—Organic	—	2	—	—
(23) Heart disease—Functional	20	35	15	—
(24) Anæmia	8	9	7	—
<i>Lungs</i>				
(25) Bronchitis	5	18	53	—
(26) Other non-tuberculous diseases	25	21	98	—
<i>Tuberculosis</i>				
(27) Pulmonary—Definite	—	1	2	—
(28) „ Suspected	1	4	11	—
(29) Non-pulmonary—Glands	—	3	1	—
(30) „ Bones and joints	1	—	2	—
(31) „ Skin	1	—	—	—
(32) „ Other forms	2	6	—	—
<i>Nervous system</i>				
(33) Epilepsy	—	—	1	—
(34) Chorea	3	3	6	—
(35) Other conditions	1	1	11	—
<i>Deformities</i>				
(36) Rickets	9	2	—	—
(37) Spinal curvature	2	2	3	—
(38) Other forms	22	30	20	—
(39) Other defects and diseases (excluding Defects of Nutrition, Uncleanliness and Dental Diseases)	48	77	1957	—
TOTAL	600	509	3741	3

B.—Classification of the Nutrition of Children inspected during the year
in the routine age groups.

(see Administrative Memorandum No. 124, dated 31st December, 1934)

Age Groups	Number of Children Inspected	A (Excellent)		B (Normal)		C (Slightly subnormal)		D (Bad)	
		No.	%	No.	%	No.	%	No.	%
Entrants	2516	359	14.26	2024	80.44	133	5.30	—	—
Second Age Group ...	1616	354	21.90	1190	73.64	72	4.46	—	—
Third Age Group	2099	683	32.53	1336	63.67	79	3.76	1	0.04
Other Routine Inspections	587	135	23.00	369	62.86	83	14.14	—	—
Total.....	6818	1531	22.46	4919	72.14	367	5.39	1	0.01

TABLE S 3

Return of all Exceptional Children in the area

The returns are in respect of all exceptional children in the area, and are not confined only to those for whom suitable accommodation is available.

For the purpose of this Table no child is included who has not been examined by the School Medical Officer, by a medical member of the Authority's staff, or by the Tuberculosis Officer.

The table is made up from the list of exceptional children as it stood on the last day of the calendar year.

Children sent by the Authority to day or residential schools outside the area are included in this table; children who are living in residential schools in the area, or attend day schools in the area, but who come from other areas, are not included.

No child is entered under more than one heading in this form

BLIND CHILDREN

A blind child is defined by Section 69 of the Education Act, 1921, as one who is "too blind to be able to read the ordinary school books used by children." This definition covers some children who are totally, or almost totally, blind and can only be appropriately taught in a school for blind children, and others who have partial sight and can be appropriately taught in a school for partially sighted children. Only the first class is included in this section.

At Certified Schools for the Blind	At Public Elementary Schools	At Other Institutions	At no School or Institution	Total
6	—	—	—	6

TABLE S 3—Continued

PARTIALLY SIGHTED CHILDREN

In this section are included only children who, though they cannot read ordinary school books or cannot read them without injury to their eyesight, have such power of vision that they can appropriately be taught in a school for the partially sighted.

Children who are able by means of suitable glasses to read the ordinary school books used by children without fatigue or injury to their vision are not included in this table.

At Certified Schools for the Blind	At Certified Schools for the Partially Sighted	At Public Elementary Schools	At Other Institutions	At no School or Institution	Total
—	25	9	—	3	37

DEAF CHILDREN

A deaf child is defined by Section 69 of the Education Act, 1921, as one who is "too deaf to be taught in a class of hearing children in an elementary school." This definition covers some children who are totally, or almost totally, deaf and can only be appropriately taught in a school for deaf children, and others who have partial hearing and can be appropriately taught in a school for partially deaf children. Only the first class is included in this section.

At Certified Schools for the Deaf	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
18	—	—	—	18

PARTIALLY DEAF CHILDREN

In this section are included children who can appropriately be taught only in a school for the partially deaf.

At Certified Schools for the Deaf	At Certified Schools for the Partially Deaf	At Public Elementary Schools	At Other Institutions	At no School or Institution	Total
—	—	1	—	—	1

TABLE S 3—Continued

MENTALLY DEFECTIVE CHILDREN

FEEBLE-MINDED CHILDREN

Mentally defective children are children who, not being imbecile and not being merely dull or backward, are incapable by reason of mental defect of receiving proper benefit from the instruction in the ordinary public elementary schools but are not incapable by reason of that defect of receiving benefit from instruction in special schools for mentally defective children.

The following table includes all such children except those who have been notified to the Local Authority under the Mental Deficiency Act in accordance with Article 3 of the Mental Deficiency (Notification of Children) Regulations, 1928. Particulars relating to these children are entered in the return of notified children (Table S 12).

At Certified Schools for Mentally Defective Children	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
82	—	1	—	83

EPILEPTIC CHILDREN

CHILDREN SUFFERING FROM SEVERE EPILEPSY

In this part of the table only those children are included who are epileptic within the meaning of the Act, i.e., children who, not being idiots or imbeciles, are unfit by reason of severe epilepsy to attend the ordinary public elementary schools.

(For practical purposes the Board are of opinion that children who are subject to attacks of major epilepsy in school should be recorded as "severe" cases and excluded from ordinary public elementary schools.)

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
2	—	—	2	4

TABLE S 3—Continued

PHYSICALLY DEFECTIVE CHILDREN

A.—TUBERCULOUS CHILDREN

Only children diagnosed as tuberculous and requiring treatment for tuberculosis at a sanatorium, a dispensary, or elsewhere are recorded in this category. Children suffering from crippling due to tuberculosis which is regarded as being no longer in need of treatment are recorded as crippled children, provided that the degree of crippling conforms to the description of a crippled child given at the head of Section C below. All other tuberculous children who are regarded as being no longer in need of treatment are recorded as delicate children provided the Medical Officer is prepared to certify under Section 55 of the Education Act, 1921, that they are incapable by reason of physical defect of receiving proper benefit from the instruction in the ordinary Public Elementary Schools.

I.—CHILDREN SUFFERING FROM PULMONARY TUBERCULOSIS

(Including pleura and intra-thoracic glands)

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
—	19	1	—	20

II.—CHILDREN SUFFERING FROM NON-PULMONARY TUBERCULOSIS

(This category includes tuberculosis of all sites other than those shown in (I) above)

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
35	196	—	—	231

B.—DELICATE CHILDREN

This section is confined to children (except those included in other groups) whose general health renders it desirable that they should be specially selected for admission to an Open Air School. Such children are included irrespective of the actual provision of Open Air Schools in the area, or of the practicability in present circumstances of sending the children to Residential Schools. Children are not regarded as suitable for admission to an Open Air School unless the Medical Officer is prepared to certify under Section 55 of the Education Act, 1921, that they are incapable by reason of physical defect of receiving proper benefit from the instruction in the ordinary Public Elementary Schools.

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
—	15	—	3	18

TABLE S 3—continued

C.—CRIPPLED CHILDREN

This section is confined to children (other than those diagnosed as suffering from tuberculosis and in need of treatment for that disease) who are suffering from a degree of crippling sufficiently severe to interfere materially with a child's normal mode of life, i.e., children who generally speaking are unable to take part, in any complete sense, in physical exercises or games or such activities of the school curriculum as gardening or forms of handwork usually engaged in by other children, and in whose case the Medical Officer is prepared to certify under Section 55 of the Education Act, 1921, that they are incapable by reason of such physical defect of receiving proper benefit from the instruction in the ordinary Public Elementary Schools.

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
—	11	—	1	12

D.—CHILDREN WITH HEART DISEASE

This section is confined to children in whose case the Medical Officer is prepared to certify, under Section 55 of the Education Act, 1921, that they are incapable by reason of such physical defect of receiving proper benefit from the instruction in the ordinary Public Elementary Schools.

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
—	17	—	16	33

CHILDREN SUFFERING FROM MULTIPLE DEFECTS

Mental defect and crippling	1
Mental defect and heart disease	1

Both these children are at Certified Special Schools.

TABLE S 4

Return of Defects treated during the year ended 31st December, 1936

TREATMENT TABLE (see note a)

GROUP I.—MINOR AILMENTS (excluding Uncleanliness, for which see Table S 6)

Disease or defect (1)	Number of defects treated, or under treatment during the year.		
	Under the Authority's scheme (see note b) (2)	Otherwise (3)	Total (4)
<i>Skin</i> —Ringworm—scalp—			
(i.) X-Ray treatment	—	—	—
(ii.) Other treatment	—	—	—
Ringworm—body	17	—	17
Scabies	49	1	50
Impetigo	309	—	309
Other skin disease	115	2	117
<i>Minor eye defects</i>	226	2	228
(external and other, but excluding cases falling in Group II.)			
<i>Minor ear defects</i>	182	3	185
<i>Miscellaneous</i>	1499	—	1499
(e.g., minor injuries, bruises, sores, chilblains, &c.)			
Total ..	2397	8	2405

GROUP II.—DEFECTIVE VISION AND SQUINT (excluding Minor Eye Defects treated as Minor Ailments—Group I.)

Defect or disease (1)	Number of defects dealt		
	Under the Authority's scheme (see note b) (2)	Otherwise (4)	Total (5)
Errors of refraction (including squint)	589	15	604
Other defect or disease of the eyes (excluding those recorded in Group I)	11	5	16
Total	600	20	620

	Under the Authority's Scheme	Otherwise	Total
No. of Children for whom spectacles were			
(a) Prescribed	575	15	590
(b) Obtained	451	15	466

TABLE S 4—Continued

GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT

Number of defects													
Received operative treatment											Received other forms of treatment (4)	Total number treated (5)	
Under the Authority's scheme in clinic or hospital, (see note b) (1)				By private practitioner or hospital, apart from the Authority's scheme (2)				Total (3)					
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)			(iv)
4	—	26	—	5	1	—	1	9	1	26	1	215	252

(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and adenoids.
(iv) Other defects of the nose and throat.

GROUP IV.—ORTHOPÆDIC AND POSTURAL DEFECTS (see note c)

	Under the Authority's Scheme (see note b) (1)			Otherwise (2)			Total number treated (see note d) (d)
	Residential treatment with education	Residential treatment without education	Non-residential treatment at an orthopædic clinic (iii)	Residential treatment with education	Residential treatment without education	Non-residential treatment at an orthopædic clinic (iii)	
	(i)	(ii)	(iii)	(i)	(ii)	(iii)	
Number of children treated	9	6	287	—	—	—	302

TABLE S 5

DENTAL INSPECTION AND TREATMENT

(1) Number of children who were:—

(i) Inspected by the Dentist:

Routine age groups—

aged 5	807
aged 6	1580
aged 7	1695
aged 8	1669
aged 9	1605
aged 10	1772
aged 11	1339
aged 12	1196
aged 13	736

12,399

(b) Specials (see note e) —

(c) TOTAL (Routine and Specials) 12399

(2) Number found to require treatment 9205

(3) Number actually treated 9412

(4) Attendances made by children for treatment 12071

TABLE S 5—continued

(5) Half-days devoted to :—			
Inspection	140		
Treatment	1641		
	Total —	1781	
(6) Fillings (see note f) :—			
Permanent Teeth	5339		
Temporary Teeth	103		
	Total —	5442	
(7) Extractions :—			
Permanent Teeth	3464		
Temporary Teeth	12022		
	Total —	15486	
(8) Administrations of general anaesthetics for extractions			
		1388	
(9) Other Operations :—			
Permanent Teeth	2415		
Temporary Teeth	609		
	Total —	3024	

TABLE S 6

UNCLEANLINESS AND VERMINOUS CONDITIONS

(i) Average number of visits per school made during the year by the School Nurses	12.6
(ii) Total number of examinations of children in the Schools by School Nurses	68953
(iii) Number of <i>individual</i> children found unclean (<i>see note g</i>)	2509
(iv) Number of <i>individual</i> children cleansed under Section 87 (2) and (3) of the Education Act, 1921	8
(v) Number of cases in which legal proceedings were taken :—	
(a) Under the Education Act, 1921	—
(b) Under School Attendance Byelaws	—

NOTES ON TABLES S 4, S 5 AND S 6

(a) The Table deals with all defects treated during the year, however they were brought to the Authority's notice, *i.e.*, whether by routine inspection, special inspection, or otherwise, during the year in question or previously.

(b) This heading includes all cases that received treatment under definite arrangements or agreements for treatment made by the Local Education Authority and sanctioned by the Board of Education under Section 80 of the Education Act, 1921. Cases which, after being recommended for treatment or advised to obtain it, actually received treatment by private practitioners, or by means of direct application to hospitals, or by the use of hospital tickets supplied by private persons, etc., are entered under other headings.

(c) Postural defects which received non-residential treatment otherwise than at an *orthopædic* clinic are not recorded in this Table.

(d) A child may be recorded in more than one category and therefore the total number of children treated will not necessarily be the same as the sum of the figures in the separate categories.

(e) The heading "Specials" in this Table relates to all children inspected by the School Dentist otherwise than in the course of the routine inspection of children in one of the age groups covered by the Authority's approved scheme, namely, to children specially selected by him, or referred by Medical Officers, Parents, Teachers, etc., on account of urgency.

(f) Temporary fillings, whether in permanent or temporary teeth, are recorded as other operations.

(g) (i) All cases of uncleanliness, however slight, are recorded.

(ii) The return relates to individual children and not to instances of uncleanliness.

TABLE S 7

Number of children examined at Routine Medical Inspections in the Schools and number found defective in each School

[illegible]

Oxton	18	12	...	...	30	25	4	5	...	2	...	...	...	...	...	...	...	...	5
St. Andrew's .....	...	25	...	...	25	21	4	4	...	3	...	...	...	...	...	...	...	...	4
St. Anne's.....	46	47	...	...	93	82	11	12	1	6	...	1	...	1	...	...	...	...	12
St. Anne's R.O.	90	71	79	15	255	149	25	25	...	13	2	3	...	1	...	...	...	1	25
St. Catherine's.....	53	67	40	11	171	82	22	36	...	16	1	6	1	...	...	...	2	...	36
St. James'	40	31	...	...	71	47	7	7	1	2	1	2	...	...	...	...	1	...	7
St. John's.....	63	47	...	...	110	89	3	3	...	2	...	...	...	...	...	...	...	...	3
St. Joseph's.....	34	24	...	...	58	47	1	1	...	1	...	...	...	...	...	...	...	...	1
St. Laurence's.....	145	140	67	11	363	278	33	37	...	19	...	1	...	...	...	...	1	2	37
St. Luke's.....	53	38	60	21	172	114	31	35	...	13	...	6	...	...	...	...	3	3	35
St. Paul's	25	22	...	...	47	41	...	...	...	...	...	...	...	...	...	...	...	...	...
St. Werburgh's.....	108	59	35	8	210	135	18	20	1	3	...	1	...	1	...	...	1	5	20
Tranmere H.G.	46	31	16	5	98	76	6	7	...	3	...	1	...	1	...	...	1	1	7
Upton C.E.	13	8	...	...	21	18	4	5	...	1	...	1	1	...	...	2	...	...	5
Upton R.C.....	24	13	5	1	43	31	2	2	...	...	...	1	...	...	...	...	...	1	2
Woodchurch C.E.	15	14	10	3	42	19	4	5	...	1	...	...	...	...	1	3	...	...	5
Alpha Drive Central .....	...	...	228	40	268	105	35	38	...	20	1	1	1	...	...	1	...	1	98
Brassey Street Central .....	...	...	214	42	256	159	13	14	...	6	...	1	...	...	2	1	...	1	14
Conway Street Central .....	...	...	212	73	285	124	42	45	...	19	...	1	...	...	...	...	1	...	45
Hemingford St. Central.....	...	...	236	47	283	142	36	37	...	16	...	...	...	...	...	...	1	...	37
Temple Road Central .....	...	...	219	83	302	95	24	28	2	1	6	...	...	...	...	...	1	8	28
Tollenshe Road Central .....	...	...	241	43	284	123	20	22	...	10	1	1	...	...	...	...	3	1	22
St. Hugh's Central .....	...	...	207	47	254	75	35	37	...	23	3	2	...	...	...	...	...	1	37
Totals	2516	1616	2099	496	6727	4611	642	704	12	10	274	20	85	9	2	145	28	47	704

Oxton	18	12	...	...	30	25	4	5	...	2	...	...	...	...	...	...	...	...	5
St. Andrew's .....	...	25	...	...	25	21	4	4	...	3	...	...	...	...	...	...	...	...	4
St. Anne's.....	46	47	...	...	93	82	11	12	1	6	...	1	...	1	...	...	...	...	12
St. Anne's R.O.	90	71	79	15	255	149	25	25	...	13	2	3	...	1	...	...	...	1	25
St. Catherine's.....	53	67	40	11	171	82	22	36	...	16	1	6	1	...	...	...	2	...	36
St. James'	40	31	...	...	71	47	7	7	1	2	1	2	...	...	...	...	1	...	7
St. John's.....	63	47	...	...	110	89	3	3	...	2	...	...	...	...	...	...	...	...	3
St. Joseph's.....	34	24	...	...	58	47	1	1	...	1	...	...	...	...	...	...	...	...	1
St. Laurence's.....	145	140	67	11	363	278	33	37	...	19	...	1	...	...	...	...	1	2	37
St. Luke's.....	53	38	60	21	172	114	31	35	...	13	...	6	...	...	...	...	3	3	35
St. Paul's	25	22	...	...	47	41	...	...	...	...	...	...	...	...	...	...	...	...	...
St. Werburgh's.....	108	59	35	8	210	135	18	20	1	3	...	1	...	1	...	...	1	5	20
Tranmere H.G.	46	31	16	5	98	76	6	7	...	3	...	1	...	1	...	...	1	1	7
Upton C.E.	13	8	...	...	21	18	4	5	...	1	...	1	1	...	...	2	...	...	5
Upton R.C.....	24	13	5	1	43	31	2	2	...	...	...	1	...	...	...	...	...	1	2
Woodchurch C.E.	15	14	10	3	42	19	4	5	...	1	...	...	...	...	1	3	...	...	5
Alpha Drive Central .....	...	...	228	40	268	105	35	38	...	20	1	1	1	...	...	1	...	1	98
Brassey Street Central .....	...	...	214	42	256	159	13	14	...	6	...	1	...	...	2	1	...	1	11
Conway Street Central .....	...	...	212	73	285	124	42	45	...	19	...	1	...	...	...	...	1	...	45
Hemingford St. Central.....	...	...	236	47	283	142	36	37	...	16	...	...	...	...	...	...	1	...	37
Temple Road Central .....	...	...	219	83	302	95	24	28	2	1	6	...	...	...	...	...	1	8	28
Tollenshe Road Central .....	...	...	241	43	284	123	20	22	...	10	1	1	...	...	...	...	3	1	22
St. Hugh's Central .....	...	...	207	47	254	75	35	37	...	23	3	2	...	...	...	...	...	1	37
Totals	2516	1616	2099	496	6727	4611	642	704	12	10	274	20	85	9	2	145	28	47	704

TABLE S 8

Past Infectious Diseases

(1) Children aged 3—7

	No. of Cases	Percentage
No Infectious Disease	473	18.8
Measles	1766	70.1
Whooping Cough	1167	46.4
Scarlet Fever	103	4.1
Diphtheria	70	2.8
Chicken Pox	636	25.3
Mumps	307	12.2

(2) Children aged 8—14

	No. of Cases	Percentage
No Infectious Disease	155	3.7
Measles	3843	91.3
Whooping Cough	2393	54.5
Scarlet Fever	330	7.8
Diphtheria	247	5.9
Chicken Pox	2201	52.3
Mumps	1412	33.5

Note.—The same child may have had more than one of these diseases

SECONDARY SCHOOLS

TABLE S 9

Medical Inspections of Children attending Secondary Schools

A.—ROUTINE MEDICAL INSPECTIONS

Number of Inspections 2121

B.—OTHER INSPECTIONS

Number of Special Inspections 2

Number of Re-Inspections 304

Total 306

TABLE S 10

A. Return of Defects found by Medical Inspection in the year ended
31st December, 1936.

Defect or disease (1)	Routine Inspections		Special Inspections	
	No. of Defects		No. of Defects	
	Requiring treatment	Requiring to be kept under ob- servation, but not requiring treatment	Requiring treatment	Requiring to be kept under ob- servation but not requiring treatment
(1)	(2)	(3)	(4)	(5)
Skin : other diseases (non-tuberculous)	1	—	—	—
Eye : Blepharitis	2	—	—	—
Defective vision (excluding squint)	121	92	—	—
Squint	1	1	—	—
Ear : otitis media	1	1	1	—
Nose and throat : chronic tonsillitis only... ..	10	21	—	—
chronic tonsillitis and adenoids ...	—	1	—	—
other conditions	4	1	—	—
Enlarged cervical glands (non tuberculous) ...	15	18	—	—
Heart and circulation :				
Heart disease—Functional	9	48	—	—
Anæmia	1	1	—	—
Lungs—Non tuberculous (not including bronchitis)	7	10	—	—
Tuberculosis—Pulmonary definite ..	—	5	—	—
suspected	—	3	—	—
Deformities : rickets.....	1	—	—	—
spinal curvature ..	2	4	—	—
other forms.....	36	47	—	—
Other defects and diseases (excluding defects of nutrition, uncleanliness and dental diseases) ...	18	30	1	—
Total number of defects	229	283	2	—

B. Number of *individual children* found at *Routine Medical Inspection* to require treatment (excluding Uncleanliness and Dental Diseases) 204

TABLE S 11

Return of Defects treated during the year ended 31st December, 1936

TREATMENT TABLES
GROUP I.—MINOR AILMENTS

Defect or disease.	Number of defects treated or under treatment during the year, under the Authority's scheme.
Minor ear defect	1
Minor injury	1
Total	2

GROUP II.—DEFECTIVE VISION AND SQUINT (excluding Minor Eye Defects)

Defect or disease	No. of defects dealt with			
	Under the Authority's scheme	By private practitioner or at hospital, apart from the Authority's scheme	Otherwise	Total
(1)	(2)	(3)	(4)	(5)
Errors of Refraction (including squint)	51	—	—	51
Total.....	51	—	—	51

Total number of children for whom spectacles were prescribed—

(a) Under the Authority's scheme	50
(b) Otherwise	—

Total number of children who obtained or received spectacles—

(a) Under the Authority's scheme	47
(b) Otherwise	—

GROUP III.—ORTHOPAEDIC AND POSTURAL DEFECTS.

	Under the Authority's Scheme non-residential treatment at an orthopaedic clinic.
Number of children treated	11

DENTAL DEFECTS

(1) Treated	174
(2) Attendances made by children for treatment	344
(3) Fillings—Permanent teeth	359
Temporary teeth	—
.....	— 359
(4) Extractions—Permanent teeth	118
Temporary teeth	11
.....	— 129
(5) Administrations of general anaesthetics for extractions	38
(6) Other Operations—Permanent Teeth	33

MENTAL DEFICIENCY (NOTIFICATION OF CHILDREN) REGULATIONS, 1928

Statement of the number of children notified during the year ended 31st December, 1936 by the Local Education Authority to the Local Mental Deficiency Authority.

TABLE S 12

Total number of children notified 9

Analysis of the above total

Diagnosis.	Boys.	Girls.
1. (i) Children incapable of receiving <i>benefit</i> or <i>further</i> benefit from instruction in a Special School :		
(a) Idiots	—	—
(b) Imbeciles	—	—
(c) Others	4	1
(ii) Children unable to be instructed in a Special School without detriment to the interests of other children :		
(a) Moral defectives	—	—
(b) Others	—	—
2. Feeble-minded children notified on leaving a Special School on or before attaining the age of 16	3	1
3. Feeble-minded children notified under Article 3, <i>i.e.</i> "special circumstances" cases	—	—
4. Children who in addition to being mentally defective were blind or deaf	—	—
Total.....	7	2

